

"MONTSERRAT" LIME JUICE

*From THE LIVERPOOL JOURNAL OF COMMERCE,
February 20, 1886.*

The "Hilda" has just reached the Mersey from Montserrat, her entire cargo, consisting of 50,000 gallons of lime juice, being the first arrival of the new crop. The demand for this article is increasing to such an extent that it may be of interest to the public to know that 180,000 gallons were sold during twelve months by the sole consignees, Messrs. EVANS, SONS & Co., Wholesale Chemists, Hanover Street, Liverpool.

In reference to above, as the season is now approaching, we shall be glad to receive usual orders from the trade, as the demand is yearly on the increase.

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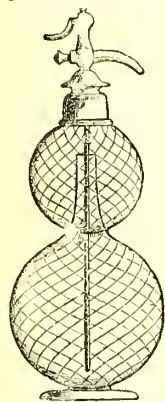
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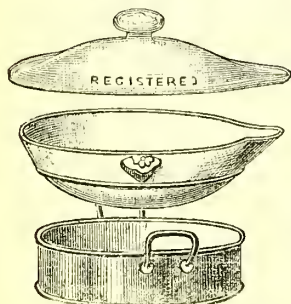
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The old form of Water Bath necessitates the use of a second vessel for pouring the melted Pomade, Cream, or other substance into the bottles or jars in which they are sold. In the "MAY-ROBERTS" Water Bath the earthenware bowl can be lifted out of the tin containing the boiling water, the process of cooling being thereby very much expedited, and the contents can be poured into the bottles or jars direct from the bowl. The Bath is also supplied with an earthenware cover.

1 PINT.	5 PINT.	10 PINT.
Each 3/0	5/6	9/6

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9 CLERKENWELL ROAD, LONDON, E.C.

TEMPORARY ADDRESS DURING REBUILDING OF PREMISES, 9 MOOR LANE, E.C.

TELEGRAPHIC ADDRESS—"MOAB LONDON."

EXCHANGE COLUMN.

TERMS.—Announcements are inserted in this column at the rate of one halfpenny per word, on condition that name and address are added. Name and address to be paid for. Price in figures counts as one word. If name and address are not included, one penny per word must be paid.

DEPOSIT OF MONEY.—In order to ensure safety we offer the following system:—The Purchaser of anything advertised in the Exchange Column may remit the amount to us. We acknowledge receipt to both parties by post-cards, and only pay the money deposited on the advice of the remitter. Whether returned to him or paid to the seller, we charge a commission of 6d. on any transaction of 3l. or less, or 1s. if above that amount.

Please note that the Exchange Column will appear Weekly. Advertisements must be received not later than Thursday in each week. Chemists will do well to look up their Surplus Stock and send an Advertisement of same.

FOR DISPOSAL.

Drugs and Chemicals.

Symes' musk, "Phoenix" brand, 1883, $\frac{1}{2}$ oz. bottles, 22s. 6d.; carriage paid; registered. 232/10.

12 oz. Howard's quinine; 6 oz. Howard's ferri quinae citras; 8 oz. croci opt.; $\frac{1}{2}$ lb. pot. iodid.; 7 lbs. cream tartar; 7 lbs. tartaric acid; 7 lbs. Howard's seidlitz; 1 doz. each Seigel's syrup, Steedman's, Beecham's, Holloway's, Pears' unscented; $\frac{1}{2}$ doz. 4 oz. genuine Colognes; 2 winchesters Allen & Hanbury's cod-liver oil; 7 lbs. Allen & Hanbury's jujubes; all perfectly new; best reasonable offer for lot accepted. 25/322.

Optical.

Eighty pairs spectacles and folders, assorted, cost 5l.; what offers? Chalmers, Druggist, Greenock.

Proprietary Articles.

Myers' cattle spice; what offers, cash or exchange? 232/14.

Ten 2s. 6d. packets Champney's poultry spice, fresh; half-price, Stanley, Southwell.

Following patents, clean and new:—2 doz. 1s. $\frac{1}{2}$ d. American sugar-coated pills, 7s. doz.; 3 doz. 6d. nigrine, 2s. 3d. doz.; 2 doz. 1s. ditto, 4s. 6d. doz.; 2 doz. 1s. Phillips' dandelion coffee, fresh, 6s. doz.; 2, 5s. Neave's food, 1s. 9d. each; 2 doz. 1s. $\frac{1}{2}$ d. Brandreth's capsicum plasters, 5s. doz.; 3 doz. 6d. Wood's aerea tooth paste, 2s. 9d. doz.; 1 doz. 2s. 6d. floral bell dentifrice, 10s.; 2 doz. 1s. $\frac{1}{2}$ d. Pettwell's balsam anised. 6s. 6d. doz.; cash or exchange. Kemp, Horncastle.

$\frac{1}{2}$ doz. 2s. 9d. Brooks' Arabian food biscuits; $\frac{1}{2}$ doz. 1s. 6d. ditto, ditto; $\frac{1}{2}$ doz. 5s. 6d. Thompson's electric life drops; 1-12 doz. 1s. $\frac{1}{2}$ d. Kaye's infants' restorative; 1-12 doz. 2s. 9d. Hammond's pain paint; 1-12 doz. 2s. 9d. Henry's calcined magnesin; $\frac{1}{2}$ doz. 1s. $\frac{1}{2}$ d. Hardy's pills of health; $\frac{1}{2}$ doz. 1s. $\frac{1}{2}$ d. Holroyd's infants' friend; 1-12 doz. 4s. 6d. Pierce's golden medical discovery; $\frac{1}{2}$ doz. 1s. 9d. Woodcock's rheumatic mixture; 1-12 doz. 2s. 9d. ditto, ditto; $\frac{1}{2}$ doz. 2s. 9d. Woodhouse's rheumatic mixture; $\frac{1}{2}$ doz. 2s. 6d. Rooke's cod-liver oil; 1-12 doz. 4s. 6d. Vicar's antilactic; $\frac{1}{2}$ doz. 2s. 9d. ditto, ditto; $\frac{1}{2}$ doz. 1s. $\frac{1}{2}$ d. eclectic; no reasonable offer refused for any or all of them. S. Parker, 360 Leeds Road, Bradford, Yorks.

Literature.

Bargains.—Attfield's "Chemistry," 8s.; Wills' "Pharmacy," 4s.; clean and new. Fred Buckley, Wesham, Kirkham.

Attfield's "Chemistry," 4th edition, good condition, 6s.; Wills' materia medica cabinet, 2s. 6d. Williams, 95 St. John's Wood Terrace, N.W.

Cassell's "Technical Educator"; Pharmacopoeia (1874), with Notes; Squire's "Companion"; Churchill "On Children"; number of 6d. standard novels. Wilks, Burnley.

Martindale's "Extra Pharmacopoeia," 3rd edit., good condition; what offers? "Pharmaceutical Chemist," 6 Greenhead Road, Huddersfield.

To Medical Men, Chemists, Dentists, and Students.—Pereira's "Materia Medica," 3 vols., 2,577 pages, good condition; published at 3l. 12s.; what offers? F. Musgrave, 19 Adelaide Villas, St. Mary's Grove, Richmond.

"Dispensing Notes," complete, as given at well-known College of Pharmacy, including copious hints on difficult pills, emulsions, suppositories, &c., with valuable "tips" for the examination room; post free 1s. 1d. Clifton, 13 St. Michael's Terrace, Wood Green, London.

Chemist and Druggist, 1882-83, 23 numbers, the lot 7s.; "The Year-book," 1876 to 1885 inclusive, 10 vols., clean as new, 30s., or offer; *Pharmaceutical Journal*, 570 numbers from 1874 to 1883, also 3 vols., 1885, 1886, 1887—the lot 10s. Macdonald, Pharmaceutical Chemist, Newington, Edinburgh.

Chemist and Druggist, odd numbers from 1861 to 1877, 1873, and from 1878 to 1885, complete, 5s. per vol., buyer paying carriage—single copies, under 1 lb. 9d., above 1s., post free; *Journal*, odd numbers from 1872 to 1885, single copies 3d., post free, quantity less; Diary, 1876 to 1878, 2s. 6d., post free. Williams, Chemist, Coleford, Gloucestershire.

Set of illegible autograph prescriptions (original) 2s. 6d., as presented to the Pharmaceutical Society of Ireland for their examinations; 30 prescriptions (catch and diffinit) given to dispense at Minor during past 12 months, 2s.; 50 questions asked of successful students at last Minor, 1s. 1d.; new "Pharmacopoeia," 5s.; lot of cheap, almost new, books; Attfield's "Chemistry," 1883, 12s.; Squire's "Companion," 1886, 8s. 6d.; carriage paid; stamp for Lieut. Saunders, Medical Tutor, 6 Rochester Square, N.W.

Soda-water Plant.

Cheap.—35 gross $\frac{1}{2}$ -pint seltzer, 15 gross soda, and 2 gross split soda-water bottles; various marks. R. M. Mills & Co., Mineral Water-works, Bourne.

Nearly new, Barnett & Foster's 2-in. pump and cylinder, in perfect order; price 25l. The Riley Manufacturing Co., Langley Lane, South Lambeth Road, S.W.

A bargain, in consequence of death.—Barnett & Foster's soda-water machine gasometer, leaden generator, and all accessories, including three bottling racks, two ordinary, and one syphon. "Chemist," 34 High Street, Putney.

Shop Fittings.

Show-jar for window. Maw's 18; height, exclusive of cover, 22 in.; word "Arrowroot"; price, with plain stand, 30s. Robinson, Chemist, Hull.

Chemist's outside lamp, with long strong iron bracket complete; also 2 large decorated spec-jars, with gilt covers and mahogany stands; all cheap. Hinton & Co., 38 Bedford Street, Strand, W.C.

Seventy-four drawers; 16-ft. run window-enclosure, with 2 large doors, glass top and back, shelving and corning, glass cupboards, and wooden date of issue, still in position. Evans, 37 Market Street, Farnworth, Bolton.

Twenty-one drawers, painted, 42 in. by 30 in. by 9 in., 9s.; 2 cupboards, shelved, painted, 47 in. by 47 in. by 13 in., 10s.; 3 drawers, painted, 42 in. by 36 in. by 14 in., 10s.; cupboard, 35 in. by 23 in. by 15 in., 2 doors 5s. 6d.; tool-chest, 2 drawers, 7s. 6d.; 7 ft. mahogany knee-holed desk, 9 drawers, 60s.; large wall fixture, 12 drawers, 12 ft. by 3 ft. by 3 ft., 100s.; 5 cwt. thumb blue. Wilks, Burnley.

Several excellent nests of mahogany drawers; also various second-hand flat glass counter-cases; 4 engraved acid bottles, 1s. each; 21, 4-lb. blue-labelled ointment-jars, 2s. 8d. each; quantity stoppered shop-bottles, all sizes, with and without gold labels; 2-gallon iron mortar and pestle, 12s. 6d.; 3-gallon ditto, 18s.; 1 pair 2-lb. French counter-scales, 12s.; 1 pair 4-lb. ditto, 15s. 6d. Simecock, 17 Guildford Street, Leeds.

Mahogany window-enclosure; 14 ft. run mahogany-fronted gold-labelled drawers, with shelving, lockers, and cornice, equal to new; 20 doz. good bottles, 20 oz. and 40 oz., gold labelled; 22, 4 lb. blue ointment-pots; 12 blue extract-pots; 10 ft. 6 in. mahogany-top counter, fitted with good drawers for labels, till, &c., &c.; 5 ft. ditto, ditto, to match, with a mahogany screen on top, with words in gold letters, "Department," "Desk," and "Cash"; scales, brass pillar; pill-machine, to cut 24; 3 pestles and mortars; 3 carbons and stands, cut stoppers; these comprise the modern fittings of a chemist's shop; will be packed free; in first-class condition; 30l.; a bargain. E. Natali, 297 Old Street, Shoreditch, E.C.

Upright show-cases for counter-fronts, with bent-glass cases along top; depth, 11 in.; height, 34 in. For particulars, Smith, Market Place, Strand.

Mahogany-top counters, 9 ft. 9 in., 7 ft. 9 in., 8 ft. 4 in.; nests 44 mahogany-fronted drawers, 8 ft. lockers under; 35 painted drawers, 5 ft.; 30 ditto, 4 ft. 6 in., locker under, eupboards each end, in all 9 ft.; 120 ft. shelving; 9 ft. 7 in. window-enclosure; 63, 40 and 50 oz. gold-labelled narrow-mouthed bottles; 7 blue syrup, 7 acid bottles; 27, 4 oz. wide-mouthed bottles; 54, 8 oz. narrow-mouthed bottles; 46, 2 lb. wide-mouthed ditto; 23, 1 lb.; and 18, 1 lb. narrow-mouthed ditto; 6 glass jars, 16 by 9 in., black caps; various ointment-jars; glass case, 26 by 19 by 9; ditto 26 by 19 by 7; 3, 1½ gal. carboys; 2 10 gal. ditto, cut stoppers; 40, 30, and 20 gal. oil-cisterns, wool covers; any reasonable offer accepted for whole or part. W. H. Willson, Chemist, Devizes.

Dental cabinet, fitted with 7 drawers, polished mahogany, 23s.; dental instruments; brass pillar scales; dispensing ditto; 12 ft. fixture drawers; lockers; shelving, a good lot, 77. 10s.; 12 ft. Spanish mahogany counter; 9 ft. ditto ditto; several mahogany-top counters, grained mahogany fronts; 2 ft. counter-case, 30s.; 2 ft. 6 in., 35s.; 3 ft., 40s.; 5 ft. ditto ditto, A 1, 97.; 3 ft. bent plate glass counter-case, A 16, 55s.; 3 ft. 6 in. ditto, ditto, 60s.; 4 ft., 70s.; 4 ft. ditto, ditto, as fig. A 17, 75s.; 2 ft., 3 ft., and 4 ft., as fig. A 3; 6 ft., as fig. A 8; 4 ft., as A 7; 8 ft., fig. A 15, 77.; toothbrush case, as fig. A 9, 35s.; A 10, 50s.; ditto, ditto, open at back, 30s.; cigar case, as fig. A 33, 7 holes, 60s.; desk and case, as fig. A 31; show steps, A 37, 60s.; sponge-cases, A 41, 69s.; A 43, 3 ft. long, 95s.; dispensing screens, 4 ft. long, A 54; 5 ft. long, A 55; and 6 ft. long, as A 55; 7 ft. 6 in. long, ditto, 5 ft. 6 in., 7 ft. plate-glass dispensing screens, glass case at each end, with silvered plate glass centre, with marble slab in front, very elaborate, from 74. 10s.; 10 ft. and 6 ft. plate-glass and mahogany counters, as A 64; mahogany wall-case, 7 ft. 7 in. long, 6 ft. 6 in. high, silvered plate-glass centre door, 87.; ditto, ditto, 7 ft. 4 in. long, 35 in. high, 67. 10s. B. Natali, 207 Old Street, near Pitfield Street, E.C.

Formulæ.

Reliable formulæ at modest prices; Brooks' recipes have stood the test over five years, their worth is verified by 1,100 chemists; see "How a Chemist made a Fortune," in first issue in month; detailed lists free; latest recipes are—"Quinine and Iron Tonic Pills," equal any liquid preparation advertised, convenient, reliable, efficacious; "Broucheixir," safe, certain remedy for chest affections; "Glycerine Cream," perfection of toilet requisites, large sale guaranteed; "Tricky," most delicious and enchanting bouquet; splendid perfume for local fame; recipes 1s. 1d. each, 3 for 2s. 6d., free, with full instructions. T. Brooks, Chemist, Louth, Lincs.

Soluble essences (non-alcoholic, for mineral waters); lime-juice cordial; chlorodyne (perfectly transparent); cascara sagrada cordial; concentrated waters (1 to 40); essence rennet (permanent, no salt); hop bitters; liquor carbonis (resembles Wright's); chemical liquors for syrups (stable); lac rosarum (inseparable, made in few minutes); ink (resembles "Dichroite"); elixir phosphori, invigorating tonic; sponges bleached (golden yellow); liquid dentifrice (like "Floriline"); marking-ink, *sine* silver, writing executed defies chemicals; saline (Ene's or Lamplough's); magic neuralgic drops; lime-juice and glycerine (white as milk, inseparable); pill-coating, pearly white, no mastic or mucilage; crimson marking-ink; hair-restorer, colourless, no deposit, *sine* silver; oleum flavum concentratum, stable colour for pomades; soluble ginger (like Hay's); liquor copaiba comp. c. buchu et matio (like Richardson's); liquor santal. flav. (resembles Hewlett's); taraxicum polophyllin, iron quinine (both resemble Pepper's); many perfumes, also toilet requisites; state wants; lists issued; all inexpensive to prepare; 5s. each (5 for 17.); analyses undertaken. Readers are warned against cheap substitutes. I was first to advertise formulæ in this journal. "Analyst," Mr. Warnes, 6 Rochester Square, N.W. (Only prepaid inquiries answered.)

Miscellaneous.

Prime English honey, exchange or cash; also cauchous in brass boxes. Orchard, Salisbury.
13-lb. copper of ess. limonis, super., 8s. per lb. Price, Chemist, Show-on-the-Wold.
Oil-pump, good, 10s.; 20 oz. ol. cubebæ, at 1s. 4d. Floyd, Bury St. Edmunds.
Lot of Pulvermacher's galvanic chains for sale or exchange. Deighton, Bridgnorth.
Half-gallon displacement apparatus (fig. 53 Maw's catalogue); also Cartner's pill-coater; what offers? Spong, Chemist, Biggleswade.
Two gross diamond dyes; 5 doz. pairs spectacles; what cash offers? Sydney Rogers, Chemist, Southsea.
Bargain.—Quantity clean white corks; daffies, 1s. gross; vials, 6d. gross; 10 lbs. best vegetable parchment, 9d. lb., carriage free. Kemp, Horncastle.
Surplus strong rough sponge, about 700 pieces, some very large, 10 to 12 to the lb., 3s. 6d. per lb.; suitable for cab or carriage use. Robinson, Chemist, Myton Place, Hull.
One 11. share Chemists and Druggists' Aërated Water Association; what offers, in cash or saleable patents? B. Thomas, Llanstephan, Carmarthen.
Large mahogany counter-scales and weights, 17.; barrel turpentine, 23s. cwt; or exchange, drugs, patent, &c. Spencer Lingdale, Cleveland.
About 10 gross circular tin boxes, suitable for harness blacking, sample sent; 1 tincture-press, 1-gal., fig. 20; also "Gladstone" printing-press; what offers? Rookledge, Chemist, Easingwold.
Cans.—Three 3-gal. iron and rimmed drums, painted, tapped, and written; 1, 5-gal. taper-necked; and 1, 1-gal. drum; all in first-class condition; low price. H., 70 Monier Road, Old Ford, London.

Two Maw's specie-jars, 21 in., with black stands, 2l. each; "Enterprise" tincture press, 10s.; Cartner's pill-coater, 15s.; Hancock's mixing-machine, 15s. Leigh, Bishop Auckland.

Trusses, plain principle (Gray, Sheffield, maker).—Adult sizes, 6 doz. right and left, 3 doz. double; children: 4 doz. single, 3 doz. double; no reasonable offer refused. Address, Barron, Harveys & Co., Giltspur Street, London, E.C.

Two 25-gal. tin cisterns, with brass taps, been used for olive oil, 3s. 6d. each; 15, 5-gal. iron drums, 2s. 5d. each, not used; 6 empty tin coal-liver oil casks, 25 gal., 2s. each; 7, 15 gal. tin glycerine carboys, 1s. 9d. each; 9 large oil-pipes, 120 to 150 gallons, 12s. 6d. each; machine for making boiled sweets, cost 3l., for 7s. Kemp, Horncastle.

Surplus sundries from stocktaking, all guaranteed in perfect condition:—12 doz. bent feeders, black fittings, 2s. 3d. doz.; 10 doz. ditto, red, 2s. 2d. doz.; 6 grs. black teats, 5s. grs.; black tubing, 7s. lb.; 1 grs. 1-oz. stoppered "Lubins," 16s. 6d.; 4 grs. 1½-oz. vials for 15s.; 10, 30-oz. oil bottles, 1s. 8d. each; 4 grs. 1d. furniture cream bottles for 8s.; 5 grs. each, 3 and 4 oz. dispensing bottles, 6s. grs.; ditto, 6 and 8 oz., 7s. grs.; 300, 8-inch filtering paper for 2s.; 500, 6-inch for 2s. 6d.; 300, 11-inch for 2s. 6d.; 2 grs. 3-oz. wood-capped pomade bottles, 12s. 6d. grs.; 1 doz. Higginson's enemas, complete, 24s.; 2-oz. deep nested willows, 2s. 9d. grs.; 4-oz. verified measures, 10s. doz.; cream white demy, 4s.; 1 pint tincture press, 4s. 6d.; 1 grs. white teats, 4s.; 1 doz. cut champagne glasses, 10s.; 10 cut ports for 6s. 6d.; 12 cut "sherries," 8s.; 4 doz. boat feeders, 3s. 6d. doz.; glass nipple shells, 1s. 10d. doz.; 3 grs. 2-dram vials, 2s. 8d. grs.; 4 grs. 4-oz. doz., 2s. 10d. grs.; 1,000 soft capsules, 7s. 3d.; best vit. corks, 6d. grs.; 12 grs. 1-dram pink cuts, 4s.; 3 grs. 2 oz. heavy panelled bottles, 7s. grs.; glass shields with teats, 2s. doz.; 1 grs. 1-oz. glass opal covered pots, 16s.; 2 green enemas, complete, for 3s.; 6 pairs tooth forceps, Tomes, 4s. 6d. each; 6, 2s. Condy's crimson fluid for 6s. 6d.; boxed vaccination-shields, 2s. doz.; 1 doz. 1s. black feeding-bottles, 6s.; Wansborough's leaden shields, 4s. 6d. doz.; 1 grs. 8 oz. plug salines, 13s. 6d.; 6, 40 oz. capt. oil-bottles, 13s.; 6 doz. 2 oz. nickel screw pomades, 8s. 6d.; 1 doz. sick-feeding cups, 4s. 6d.; 12 grs. ginger-beer corks, 8s.; 2 grs. Critchley's starch gloss, 11s. 9d.; 1 doz. 1½ in. flat varnish-brushes, 4s. 6d.; 56 lbs. assorted fruit pastilles for 18s.; 10, 24 oz. blue (plum) syrup bottles, 8s. Simcock, 17 Guildford Street, Leeds.

WANTED.

Samples of gum arabic, with price. Rayson, Chemist, Nottingham.
Attfield's "Chemistry" and Bentley's "Botany." Price to Wm. Gilliat, Boston.
Pessary mould, in good condition. Apply, A. Nelson & Co., 23 Duke Street, Grosvenor Square, W.
Copies of *Chemist and Druggist* for February 15, 1886; full price will be given by the Publisher. 118/71.
Baker's or Bracher's mixing-machines, small and large, good condition; lowest price. Selleck, Chemist, Stourbridge.
Southall's 1885 materia medica collection in wooden box; state lowest price, and if in perfect condition. Robinson, Chemist, Myton Place, Hull.
Tooth forceps, modern set; state maker, when purchased, and lowest price; also top conical part gallon glass displacement apparatus. "Chemist," Stokesley.

Address Wanted.

Geo. Pemberton, Esq., late of Worthing. Andrews, Chemist, Eastbourne.

DR. OSCAR LIEBREICH'S LANOLINE, FOR PHARMACEUTICAL AND COSMETICAL PURPOSES.

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Is **THE ONLY** Filtering Medium that **really** Purifies Water, rendering it free from Impurities in **SOLUTION** as well as from Suspension.

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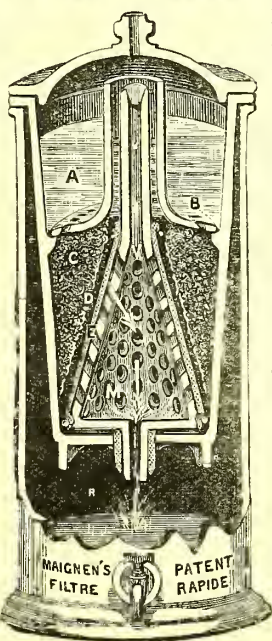
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Five Medals, International Health Exhibition, London.

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The only Filter recommended by the Sanitary Authorities.

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Is guaranteed to remove all germs of disease and impurities in solution, such as sewage and lead. Can be cleansed easily and the Filtering Medium renewed.

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The Author and Patentee,
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Two Prize Medals, International Health Exhibition.
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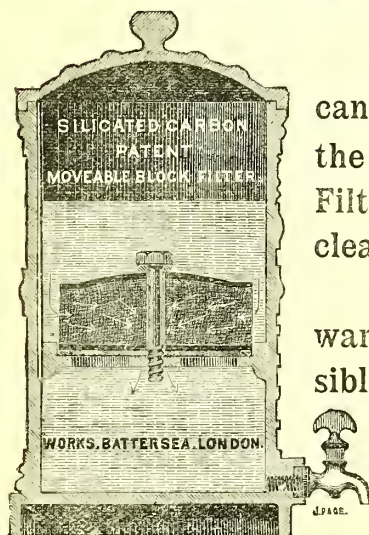
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Patentee—**P. A. MAIGNEN,**
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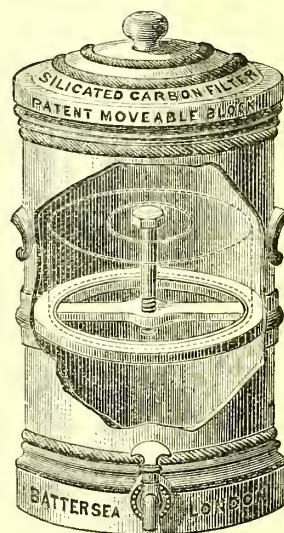


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Refrigerative Terra Cotta, do. do. :—

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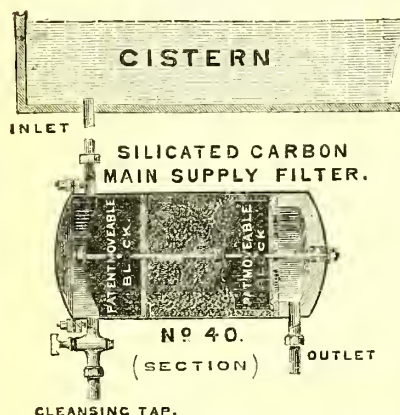
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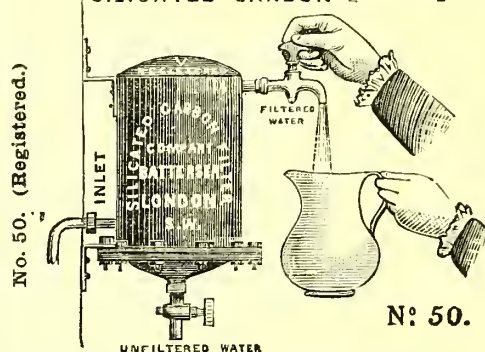
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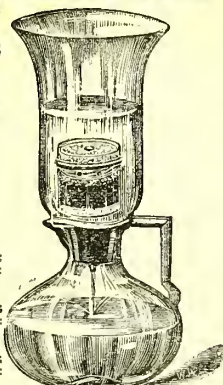
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1 pint, 2/6; 2 pints, 4/; 3 pints, 5/.

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1 pint, 3/6; 2 pints, 5/; 3 pints, 6/.

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2 pints, 5/6; 3 pints, 6/6; Engraved:
1 pint, 4/6; 2 pints, 6/6; 3 pints, 7/6.

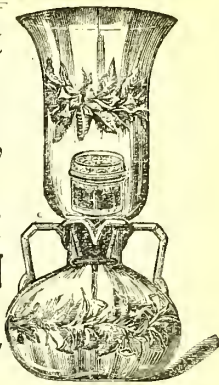


Style "L."

Very **LIBERAL** Discount
to the Trade.

Judson's GLASS WORKS,
ORMSIDE STREET,
OLD KENT ROAD, LONDON.

D. JUDSON & SON
(LIM.),
SOUTHWARK STREET,
LONDON.



Style "M."

ESTAB.
1850.



ADVISE
GRATIS.

RACKHAM'S CELEBRATED DOG MEDICINES.

Distemper, Tonic, Condition, Worm, Purging, Jaundice, Diarrhoea, and
Cough Balls, Katalapra (for Mange), Ear Canker Specific, Japanese Soap
and Insect Powder, Worm Powders, &c.

Price 1/-, 2/6, 5/-, and 10/- per box. Dog Medicine Chests, 10/6 to £5.
Norfolk Meat and Plain Biscuits, 18/- and 16/- per cwt. carriage paid.

RACKHAM'S HORSE AND CATTLE MEDICINES.

Price 2/6, 5/-, 10/-, & 20/-.

Agents wanted in every town. Chemists supplied on sale or return. Special
Quotation for Cash and Export Orders.

RACKHAM & CO., Upper Goat Lane, Norwich, England.

SPONG'S (Registered) BEDFORDSHIRE PIG POWDERS

Chemists can have space on Handbills for own speciality,
under their Name and Address.
Wholesale of **BARCLAY, SANGER, EDWARDS, HOVENDEN, & Co.**
Manufactory: BIGGLE-WADE, BEDS.

HAMMO SPECKLED.



TRADE MARK
REGISTERED.

All Orders by Post receive immediate attention.

LEECHES!

Warranted Healthy, Wholesale
and for Exportation, Direct
from Marshes.

FITCH & NOTTINGHAM,
Leech Breeders,

MARSEILLES, & 55 PENTONVILLE
ROAD, LONDON, N.

HORSE, CATTLE, AND SHEEP MEDICINES.


BY ROYAL APPOINTMENT.

TO HER MAJESTY THE QUEEN

By Special Warrant,
Dated 27th December, 1865.

DAY, SON & HEWITT,

INVENTORS AND SOLE PROPRIETORS OF THE

TO HR.H. THE PRINCE OF WALES

By Special Warrant,
Dated 10th February, 1866.

"ORIGINAL" STOCK BREEDERS' MEDICINE CHESTS.

Containing the following Matchless Remedies for all Disorders in Horses, Cattle, Calves, Sheep, & Lambs:

THE CHEMICAL EXTRACT.

For assuaging pain and inflammation in all wounds, saddle galls, strains,
bruises, and swellings in horses; for paining after calving and lambing,
and for swollen udders and sore feet. 1/4 doz. box, 7s. 6d.

THE RED DRENCH

Celebrated for inflammatory disorders; such as fevers, pleurisy, foot-and-
mouth complaint, yellows, surfeit, and red water. Also for difficult
calving and lambing. 3s. 6d. and 13s. per dozen box.

THE GASEOUS FLUID.

Unmatched for colic or gripes and debility in horses, for colds, chills,
shivering fits, and diarrhoea in cattle, calves, and sheep. 20s. per dozen box.

THE CARMINATIVE CHALK.

A warm stomachic in severe diarrhoea or flux, by way of change of the
gaseous fluid in great irritation of the bowels. 1/4-dozen box, 10s.

Price of Chests, with "Guide to Farriery"—No. 1, £6/6/0; No. 2, £2/16/6; No. 4, £2/7/6 (for horses only). Carriage paid.

THE RED PASTE BALLS AND RED POWDERS.

Invaluable for ill conditioned horses and after hard hunting and driving
For coughs, colds, staring coat, itching, swollen legs, and want of strength.
The Powder is to be given in the feed. 7s. 6d. per dozen.

THE BLACK PHYSIC BALLS

Excellent for confined bowels and for worms in horses, but a bran mash
sh. uld be first given. In bad cases of worms give a dose of Broncholine
after the Ball. For cows and oxen, for stoppage of the bowels, give a
dissolved Ball. 8s. per dozen.

THE BRONCHOLINE.

Invaluable for husk, hoarse, or cough in cattle, calves, and sheep; for
tapeworms, and worms in horses. 1/4-dozen box, 7s. 6d.

THE GASEODYNE.

Used as lendarum in uncontrollable spasmodic pains in ewes lambing
and perfectly safe. 1/4-dozen box, 10s. 6d.

THE ALCOHOLIC ETHER.

Used as sweet spirits of nitre in severe colds and shivering fits. 1/4-dozen
box, 7s. 6d.

Prepared only by **DAY, SON & HEWITT**, 22 DORSET STREET, LONDON, W.,

And sold by all Wholesale Houses in London; Hood & Co., Melbourne; Kempthorne, Prosser & Co., Dunedin and Auckland; Fairthorne & Co.,
Lancaster; Felton, Grimwade & Co., Sydney and Wellington; Dombain & Co., Christchurch.

A LIBERAL DISCOUNT TO EXPORTERS, AND ALL PARTICULARS ON APPLICATION.

GUÉRET FRÈRES,

Mechanical Engineers, privileged in France and Abroad,
72, BOULEVARD DE LA GARE, PARIS.

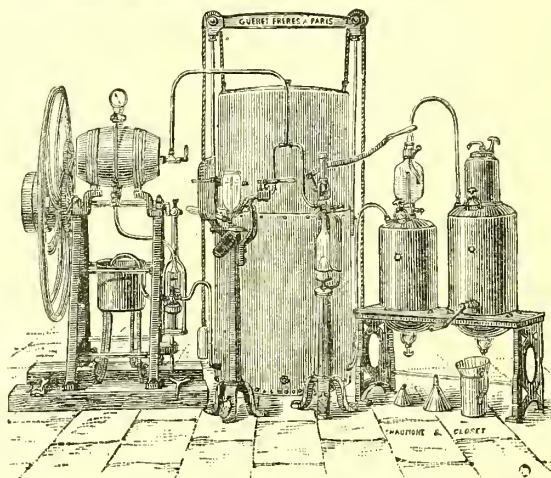
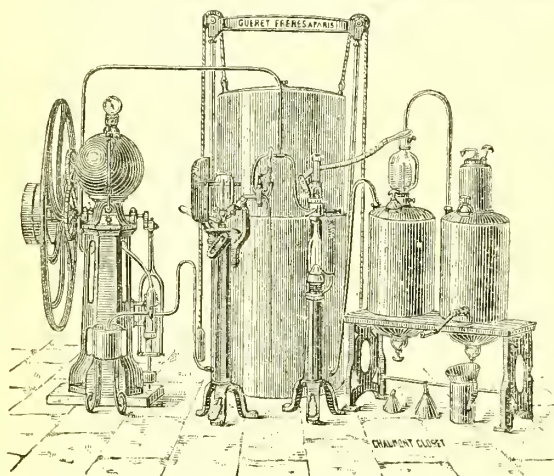
GOLD MEDAL, AMSTERDAM, 1883.

PLANT & SYPHONS FOR THE MANUFACTURE OF AÉRATED BEVERAGES,

WITH ALL THE LATEST IMPROVEMENTS.

COMPLETE CONTINUOUS APPARATUS, SPHERICAL OR PEAR-SHAPED.

The Saturator is of brass, guaranteed free from every defect in construction and perfect in action, tested at high pressure, combining economy with the greatest sanitary security, and enjoying an unrivalled reputation.



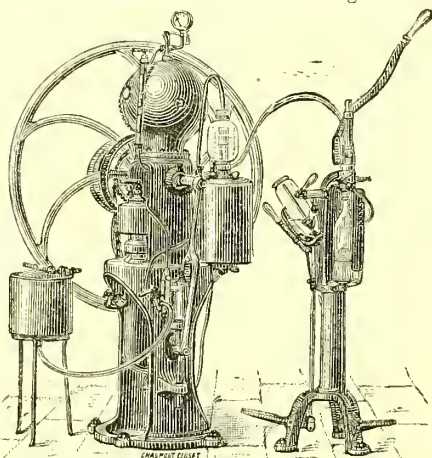
SYPHONS

With small levers, fittings of metal of highest quality, and best glass.



CONTINUOUS APPARATUS

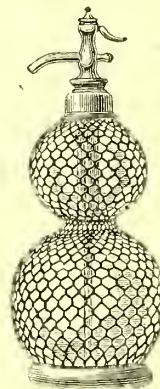
For the automatic generation of carbonic acid gas, the only practical system applicable to the manufacture of Aërated Beverages.



GAZOSELTZ

For the instantaneous production of Aërated Beverages at table.

Any one can use them.



FULL PARTICULARS AND GENERAL CATALOGUE SENT ON APPLICATION.

SUPPLEMENT TO "THE CHEMIST AND DRUGGIST."

SATURDAY, MARCH 6, 1886.

i

Hunyadi János

CAUTION.—Circumstances which have come to the knowledge of Andreas Saxlehner, Buda Pest, Sole Proprietor of the Hunyadi János Spring, compel him to WARN the British Public against SPURIOUS IMITATIONS. To secure genuineness, purchasers should see that every bottle has on the LABEL the name of "THE APOLLINARIS COMPANY (LIMITED), London."

146 MINORIES, LONDON, E.C. New York Sydney & S.

SODA WATER MACHINERY

AND ALL ACCESSORIES FOR THE TRADE

BRATBY & HINCHLIFFE

HEAD OFFICE
SANDFORD ST., ANCOATS, MANCHESTER.

BOXES BOTTLES, MACHINERY, ESSENCES.
Catalogues, Circulars, Testimonials Post Free

KINMOND'S APNEUMATIC MINERAL WATERS

IN ORDINARY

BOTTLES AND SYPHONS.

The Largest Manufactory in England.

ESTABLISHED 1841.

SEND FOR TRADE LIST AND COMPARE PRICES.

MANUFACTORY—
LEAMINGTON.

T. & F. J. TAYLOR'S

AERATED WATERS,
Newport Pagnel.

ESTABLISHED 1835.

SODA, POTASH, SELTZER, AERATED (without Alkali), and LITHIA WATERS, LEMONADE AND GINGER ALE.

Each Bottle is protected by a Label bearing the Signature of the Firm.

Purity and Excellence of the Water certified by Analysis by Professor ATTFIELD, Ph.D., F.C.S.

TEMPERANCE WINE MIXTURES

For producing delicious Temperance Beverages in a few minutes.

One Shilling Bottle will make 5 quarts of Cordial.

GINGER, RASPBERRY, STRAWBERRY, BLACK CURRANT, LEMON, ORANGE, PINEAPPLE, PEPPERMINT, &c.

Sole Agency given to Chemists in towns not already represented.
Attractively put up in 6d. and 1s. Bottles. Liberal Terms.
Labels and Titles protected. Write for Prices.

YOUNGER & RIDLEY, Brampton, Cumberland.

JUDSON'S SPECIALITIES.

Dyes, Gold Paints, Artists' Black, Krokum, Filters,
Marking Ink, Cooling Crystals, Wood Stains, &c., &c.

ARE NOW BEING VERY LARGELY

ADVERTISED EVERYWHERE !!

ILLUSTRATED CATALOGUE AND TERMS ON APPLICATION TO

DANIEL JUDSON & SON, Lim., 77 Southwark Street, LONDON.

GOLD and SILVER MEDALS, Health Exhibition, 1884.

GOLD MEDAL, Antwerp, 1885.

RIMMEL'S PERFUMERY AND TOILET SOAPS.

Principal Specialities:

Rimmel's Choice Perfumes, for the Handkerchief, Ilang-Ilang, Vanda, Malvetta, Violet, White Heliotrope, Exquisite, &c.

Rimmel's Celebrated Toilet Vinegar, a Tonic and reviving Lotion for the Toilet or Bath, 1s., 2s. 6d., & 5s.

Rimmel's Lavender Water, Florida Water, and Eau de Cologne.

Rimmel's Extract of Lime Juice and Glycerine, Queen's Pommade, Brillantine, and Philcome, for the Hair.

Rimmel's Violet-Scented Oatmeal, and Violet and Rice Powder, for the Complexion.

Rimmel's Brown Windsor, Honey, Transparent, Coal-Tar, Glycerine, Army and Navy, Almond, Lettuce, White Heliotrope, Nice Violets, Tilia, and other Superior Toilet Soaps.

Rimmel's Carbodentine, White Rose Soap, and Coral Tooth Paste, for the Teeth.

Rimmel's Aromatic Ozonizer, Ozonized Toilet Waters, and Cassolette, the only agreeable disinfectant.

Sold by all Chemists and Druggists.

The Usual Allowance to the Trade.

Perfumes Shipped in Bond at a Great Reduction.

EUGENE RIMMEL, Perfumer to H.R.H. the Princess of Wales, 96 STRAND, LONDON.



<p>INCREASE YOUR INCOME.</p> <p>We are now appointing Agents for our renowned Indian Teas, in $\frac{1}{4}$, $\frac{1}{2}$, and 1 lb. Packets. Gives no trouble; interferes not with ordinary business; and ensures a COMFORTABLE INCOME.</p> <p>Applications to BROOKE, BOND & Co., Wholesale Tea Blenders to the Trade, 17, Piccadilly, Manchester.</p>	<p><i>Two Shillings?</i></p> <p><i>Impossible!</i></p>	<p>THE <i>Most Admirable</i> TEA @ 2/- per lb <i>Sold only by</i> BROOKE, BOND & Co. PICCADILLY MARKET ST MANCHESTER.</p>
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M. A. CRAVEN & SON, WHOLESALE AND EXPORT CONFECTIONERS,

MAKERS OF

Medicated Lozenges, Refined Liquorice, Jujubes, and every description of Confectionery,

IMPORTERS AND MANUFACTURERS OF LEMON, ORANGE, AND CITRON PEELS.

EBOR CONFECTIONERY WORKS. YORK.

Lozenges of all descriptions made from Customers' private formulæ (or ingredients), and stamped with any name or device.

SPECIALITIES—Cough, Peppermint, Rose, Musk, Bouquet, Cachou, and all kinds of Medicated Lozenges.

ESTABLISHED 1843.

PRICE LIST ON APPLICATION.

HONOURABLE MENTION:

INTERNATIONAL FOOD EXHIBITION, AGRICULTURAL HALL, LONDON, OCTOBER, 1880.

GOLD MEDAL, SOCIETY OF ARTS, PARIS, 1884.

TO AERATED WATER MANUFACTURERS.

Ginger Ale, Ginger Beer, and Lemonade, made from the following Essences, are unrivalled for their exquisitely fine flavour, and richness of aroma.

HAY'S
SOLUBLE + ESSENCES.

ARE GUARANTEED TO BE THE FINEST IN THE MARKET.

HAY'S SOLUBLE ESSENCE OF JAMAICA GINGER.

A Pure Essence of the Finest Ginger, perfectly free from Capsicum. Highly adapted for the manufacture of Transparent Aerated Waters, and for all Dietetic, Medicinal, and Pharmaceutical purposes. Trade Price, 5s. per lb.; 12 lbs. and upwards, 4s. 6d. per lb. Extra Fine and Strong, 5s. 6d. per lb.; 12 lbs. and upwards, 5s.

HAY'S COMPOUND FORTIFIED ESSENCE OF JAMAICA GINGER. FOR FIRST QUALITY GINGER ALE.

Specially prepared for the manufacture of the very Finest Ginger Ale made, is an addition of Vanilla, Lemon, and other flavours to the above. It imparts, with the exquisite Ginger Aroma of the above-mentioned Essence, a peculiarly fine fruity flavour, combined with the fullest amount of fragrance and pungency. Trade Price, 5s. 6d. per lb.; 12 lbs. and upwards, 5s. Extra Fine and Strong, 6s. per lb.; 12 lbs. and upwards, 5s. 6d. Quantity required, five fluid ozs. to each gallon of Syrup, making 106 10-oz. Bottles.

HAY'S GINGER ALE EXTRACT. FOR SECOND QUALITY GINGER ALE.

This Extract is strongly recommended for the manufacture of Ginger Ale, to which it imparts Pungency, Colouring, great Brilliancy, and an unusually Fine Ginger Flavour and Aroma, and makes a thoroughly good article. Trade Price, 4s. 6d. per lb.; 12 lbs. and upwards, 4s. Quantity required, three fluid ozs. to each gallon of Syrup, making 106 10-oz. Bottles.

HAY'S GINGER ALE ESSENCE. Highly Concentrated. FOR THIRD QUALITY GINGER ALE.

This Essence, which is a complete Bouquet of Flavours in a highly concentrated state, makes a Ginger Ale possessing an amount of aroma, flavour, and quality that will be sure to command a large sale, and that is unsurpassed by the so-called finest Belfast Ginger Ale. Trade Price, 9s. per lb.; 12 lbs. and upwards, 8s. 6d. Quantity required, half a fluid oz. to each gallon of Syrup, making 106 10-oz. Bottles. This Essence will be found most valuable to the general trade.

HAY'S SOLUBLE ESSENCE OF MESSINA LEMONS.

A magnificent Preparation, perfectly soluble, and makes the finest Lemonade obtainable. Trade Price, 8s. 6d. per lb.; 12 lbs. and upwards, 8s. "Added in the proportion of one fluid oz. to each gallon of Syrup, the Soluble Essence imparts the most delicious flavour of the Lemon."—*The Chemist's Journal*.

HAY'S GINGER CHAMPAGNE ESSENCE.

For the manufacture of Ginger Champagne. This Essence is a combination of the finest flavours, and imparts with the Ginger a most exquisite aroma, making a most delicious and refreshing approximation to Champagne. Trade Price, 8s. per lb.; 12 lbs. and upwards, 7s. 6d. per lb. Quantity required, ten fluid ozs. to each gallon of Syrup, making 106 10-oz. Bottles.

HAY'S TONIC ALE ESSENCE.

Tonic Ale made from this Essence is strongly recommended as a most agreeable, non-intoxicating, and appetising beverage, in the place of Bitter Beer. Price, 6s. 6d. per lb.; 12 lbs. and upwards, 6s. Quantity required, 5 fluid ozs. to each gallon of Syrup making 106 10-oz. bottles.

NOTE.—The above are specially recommended to manufacturers requiring the very finest Essences obtainable. There is nothing in the market to equal them.

A FEW OF THE MANY REPORTS OF THE LEADING HIGHEST MEDICAL AND OTHER JOURNALS ON MY PREPARATIONS ARE HERE QUOTED:—

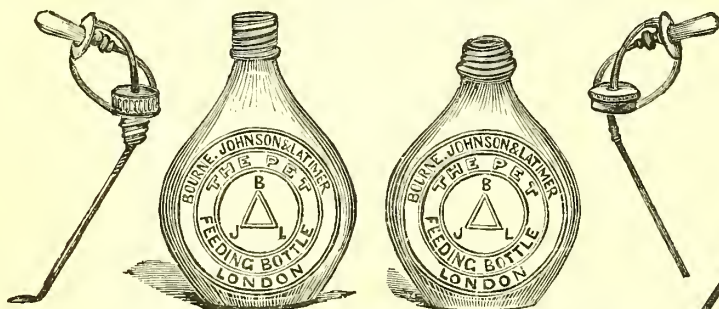
SOLUBLE ESSENCE OF GINGER.—"It should entirely supersede the official preparation of the British Pharmacopœia."—*Medical Press*. "This Essence is of a very delicate and beautiful appearance, the aroma is fine and powerful, and its strength is very great indeed. The flavour is really exquisite, and it concentrates in quite an extraordinary degree the very best aromatic qualities of ginger."—*Drinks*, London, Sept. 1, 1884.**GINGER CHAMPAGNE MADE FROM HAY'S ESSENCE.**—"An excellent and most agreeable beverage."—*The Lancet*. "One of the most delicate and wholesome drinks in the market."—*Medical Press*. "The fine Aroma of Ginger which Mr. Hay has caught with remarkable success is an excellent substitute for Alcohol, as it gives what old port wine drinkers used to call 'body,' and to many people besides professed teetotallers, an occasional change at least from the Royal French Beverage to its less costly, but equally sparkling and more refreshing, English rival is a welcome treat."—*The Chemist and Druggist*.**GINGER ALE MADE FROM HAY'S FORTIFIED ESSENCE.**—"It pours out with as fine a 'head' as any glass of ale, and possesses all the fine aromatic flavour of the pure ginger. It is a beverage which is sure to win favour wherever introduced."—*The Chemist and Druggist*.The difference between preparations made from the above Essences and those made from the numerous spurious imitations of the above, bearing the name of Soluble Essences, is most marked, and no manufacturer using the latter can compete with one using Hay's Preparations, as is universally known. *The greatest care is used in packing for Export.*W. HAY, MANUFACTURING CHEMIST, ENGLAND
BEVERLEY ROAD, HULL,

Indentors, to prevent disappointment, should specify that the goods are to be of Hay's Manufacture.

W. HAY CAUTIONS THE TRADE against the use of those spurious so-called SOLUBLE ESSENCES which, besides having NO GINGER AROMA, are FLAVOURLESS, RANK, and DISAGREEABLE, and are little more than TINCTURES OF CAPSICUM.

THE "PET" FEEDING BOTTLE

Is one of the Most Saleable Articles of its kind ever introduced.



Nos. 11 and 17.

Nos. 19 and 20.

They are neatly put up in strong boxes with handsome labels.

The following is a List of the most popular numbers:—

No.		Per doz.
6.—	Green glass bent neck, white fittings.....	3/6
7.—	" " " black ".....	3/9
10.—	" screw glass stoppers, white ".....	4/
11.—	" " " black ".....	4/3
14.—	White flint glass, china caps.....	7/6
17.—	" " glass screw stoppers.....	8/
19.—	" " pure tin caps.....	8/
20.—	" " gilt metal caps.....	12/
21.—	" " gilt china caps.....	12/
22.—	" " glass screw stoppers.....	12/

Nos. 6, 7, 10, and 11 are also supplied in boxes containing 1 gross at specially reduced prices.



MUSICAL BELLS.

A New Indiarubber Teething Pad, with Nickel-plated Bell, very sonorous.

Twelve on a Show-card,
4/6.

An Illustrated Price Catalogue, containing nearly 1,000 Woodcuts, will be ready for delivery in March.

A Copy will be sent to any Chemist on receipt of Business Card.



THE
NEW



Earthenware Inhaler

With Burnt-in Directions for Use.

Price 18/ per dozen.

The only one that can be sold at 2/6 and yield a good profit.

THE NEW NIGHT LAMP

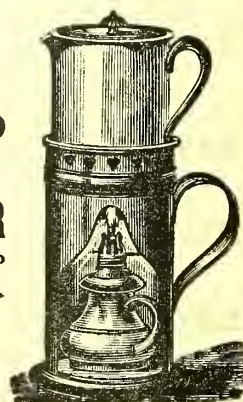
AND

FOOD WARMER

Is the CHEAPEST LAMP ever offered to the Public.

Price 22/ per dozen.

Consumes about a Pennyworth of Petroleum Oil per week.



SPRAY PRODUCERS.

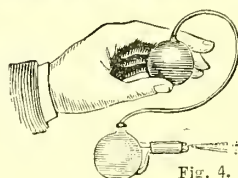


Fig. 4.



Fig. 1.

Glass Spray, for Perfume, as fig. 1	18/ per dozen.
" " Throat, as fig. 4	27/ "
Double-action Spray, with Nickel-plated Mounts	36/ "
" " with Vulcanite Mounts	36/ "

Ten per cent. Discount allowed for prompt Cash.

NOVELTIES ARE BEING CONTINUALLY
ADDED TO OUR STOCK.

BOURNE, JOHNSON & LATIMER, SUNDRIESMEN, LONDON, E.C.
34 & 35 FURNIVAL ST., LONDON, E.C.

Advertisements in this issue are paged; announcements appearing on alternate weeks or at other intervals have not the page indicated.

Telephone Number,
1852.

INDEX TO ADVERTISEMENTS.

Telegraphic Address—
CHEMDRUG LONDON.

Please note that to satisfy Post Office requirements the Advertisements are paged twice—once in Arabic, once in Roman numerals.

TARIFF FOR DISPLAYED ADVERTISEMENTS.

To secure the Series Rates, Orders must be given in advance.	1 Insertion, net	4 Insertions, each net	7 Insertions, each net	13 Insertions, each net	27 Insertions, each net	53 Insertions, each net
One Page	£7 10 0	£5 0 0	£4 10 0	£4 0 0	£3 15 0	£3 10 0
Half "	4 2 6	2 15 0	2 9 6	2 4 0	2 0 0	1 17 6
Quarter "	2 8 0	1 12 0	1 9 0	1 5 6	1 2 6	1 0 0
Eighth "	1 7 0	0 18 0	0 16 3	0 14 6	0 13 6	0 12 6

Advertisers are requested to note that the DIARY forms one part of the year's publications, and that one insertion of every series in force in October of any year will be published in the DIARY as a matter of course, and will be charged for at the series rate.

THE PROPRIETORS DO NOT VARY THEIR QUOTED TERMS UNDER ANY CIRCUMSTANCES.

A		B		C		D		E		F		G		H	
A1 BRAND MENTHOL CONES Menthol in variety xix		BAILEY, W. H., & SON, Trusses, Bandages, &c. BAILY, J., A Physician's Pharmacopoeia 4		BURGOYNE, BURBIDGES & CO., Wholesale Druggists, 121, Moxon's Magnesian Apertent		DALES, J. T., Dublin		EDINBURGH CLASSES, School of Pharmacy 4		FARINA, J. M., "Gee nuber"—Eau de Cologne		GALLAIS, E., & CO., Mineral Waters		HALLER & CO., Lanoline 7	
ÆSCULAP BITTER WATER CO.,		BANKS & RATCLIFFE Boxes, Staves, and Cask Needs		BURROUGHS, WELLCOME & CO., Syr. Hyposphos. Co., Fellows, 5-Drug Mill and Tincture Press ix		DARKE, EDWARD, Pure Vaccine Lymph		EDWARDS, E. M., & SON, Tea Dealers		FARINA, J. M., No. 4, Soda Water Machinery		GASKELL, DEACON & CO., Bicarbonate of Soda		HARDEN & CO., Beth-han Toothache Cure	
ALLEN & CALDER BOTTLE CO.,		BARBER, G., & CO., Cr. Iron Marking Ink		BUSH, W. SON, & CO., Moringidine, Chemicals		DARTON, F., & CO., Thermometers, Electric Bells, Barometers		EDWARDS' PATENT AERATED WATER		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARKER, STAGG & MOSS	
ANTOINE FILS		BARCLAY & SONS, Chocolate Roussant, Patent Medicines		BUSINESSSES FOR DISPOSAL		DAVENPORT, J. T., Chlorodyne		EISNER & MENDELSSOHN, American Herbs		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRIS, P., & CO., Oxide of Zinc	
APOLLINARIS CO., Apolinaris Water, Hunyadi Janos Water, xi		BARKER, W., & SON, Engravers TEXT		BYGRAVE, J. & W., Herbalists, Leeches, Waters		DAY, SON & HEWITT, Veterinary Medicine Chests 13		ELLIS, R., & SON, Ratin Altered Waters		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, F. J., & CO. (LIM.), Hydrolyse	
ARUNDEL & MARSHALL, Folding Card Boxes		BARNES, J. B., Impermeable Carriage Paint		CAMPBELL & CO., Ceylon Chemists		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EPSTEIN, J., & CO., Homeopathic Medicines		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
ASHWORTH BROS., Metallic Comb-brushes		BARNETT & FOSTER, Machinery, Syphons,		CENTRAL SCHOOL OF CHEMISTRY AND PHARMACY, Scientific Apparatus 4		DAY, SON & HEWITT, Veterinary Medicine Chests 13		ESCHMANN BROS. & WALSH, Silk Catheters		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
ASSISTANTS WANTING SITUATIONS.		BARTON BROS., Dentifriceum		CETTI, E., Celandine		DAY, SON & HEWITT, Veterinary Medicine Chests 13		ESTES, E. B., & SONS, Turned Wood Boxes		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
ATKINSON & BARKER, Infants' Preservative		BARRON, SQUIRE, Manufacturing Pharmacists		CHIEVALIER & CO., Medicine Perles (Capsules)		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
AUSTIN & CO., Cardboard Boxes and Perfume Sprinklers, &c.		BATTLE, J. R., Vermin Killer		CHRISTIAN, H. J. (H. BOND)		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
AYRTON & SAUNDERS, "Silver" Comb and Menthol Cones, Various Boxes		BAUMGARTNER & CO., Brilliantine Polishing Powder		CHRISTY, T., & CO., Menthol Cones, Specialties		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BEDDARD, J., Belgavia Tooth Paste		CHUBB, J. C., & CO., Sealitt, Violet, Fullers' Earth Powders		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BEECHAM, T., Pills		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BEESEY & SONS, Liebig's Iodized Cod Liver Oil		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENNETTE & CO., Manna Cake		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEBB, Wholesale and Export Druggists, London xvii		FELTON, GRIMWADE & CO., Druggists, Melbourne		GEORGE & WELCH, Dandelion Coffee, &c.		HARRISON, W. B., Ice, Mineral Waters	
		BENTLEY, E., & SONS, Opal Glass Pots		CLARKE, S., Nursery Lamp Food Warmers		DAY, SON & HEWITT, Veterinary Medicine Chests 13		EVANS, LESCIEUR & WEB							

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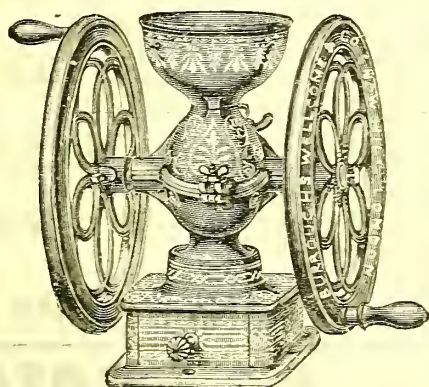
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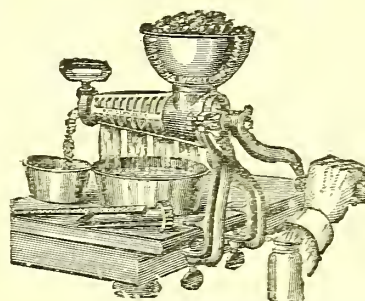
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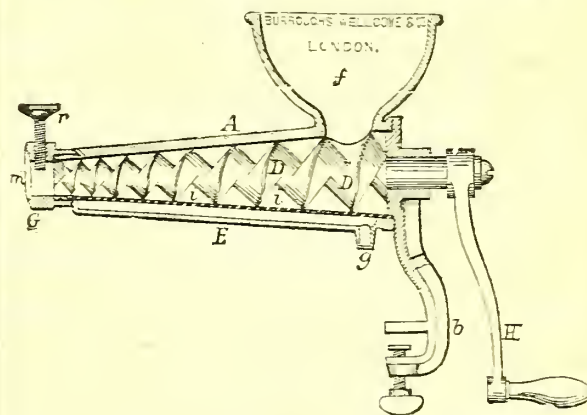
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Published every Saturday.

Subscription 10s. per year, payable in advance;
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Post free to every country in the world. Single copies, 4d. each.

Supplied only to persons connected with the Trade.

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In our Trade report will be found several notes on rare or unusual drugs which have appeared in Mincing Lane since our last issue. We expect to publish such notes occasionally in future, and those interested should look for them in our Mincing Lane report.

* *

If the progress of homœopathy may be estimated by the prosperity of its institutions and the liberality of its believers, it must be in a good way. A Liverpool homœopath (Mr. Tate) has recently given a second donation of 10,000*l.* towards a hospital for the city for homœopathic treatment, and the London Homœopathic Hospital, which has gradually increased the number of its beds to eighty, has just built a new ward for men with fourteen more beds. To endow this ward a new subscription has been started. Major Vaughan Morgan, the chairman of the hospital, contributes 1,000*l.*, Lord Ebury 100*l.*, Colonel Clifton Brown 100*l.*, and so on. Moreover, bazaars and concerts are being organised, which are certain to be fashionably patronised.

* *

A case has lately been decided in the New York Supreme Court (Van Wyck v. Horowitz) which disposes, so far as that Court has jurisdiction, of the claim, which is generally considered a sound one, of an assistant benefitting by the reputation of a former employer. Van Wyck is a watchmaker, who had employed Horowitz as an assistant, and he applied for an injunction against Horowitz to prevent him describing himself as "late with James P. Van Wyck." The Court granted this injunction, on the ground that the defendant was attempting to transfer to himself a part of the reputation of the business of the plaintiff, which belongs as truly to the plaintiff as any part of his personal property. The application of this little history is sufficiently obvious.

THE NEW YORK MARKETS.

THE following details of the American drug market, which are of some importance, reach us too late to be included in the proper section. It will be noted that the prices sterling (in parentheses) are what the different articles would cost delivered in London, all market allowances, discounts, &c., being taken into account.

COCA LEAVES.—Cable advices from Peru report an advance of 15 per cent., consequently, and in spite of the bear operations going on here, holders of good dark green Huanuco leaves have raised their price to 40c. (1*s.* 9*d.*), and if sales begin at anything near this figure, much higher rates will be sure to prevail. With the present demand for cocaine, there is not three months' supply of leaves in this market.

PODOPHYLLUM RESIN is just now quoted at extremely low rates, said to be owing to a disagreement between manufacturers; consumers ought to purchase a good supply while this "war" lasts. Best quality is quoted \$2.50 per lb. (10*s.* 9*d.*)

GUARANA continues very scarce. Last week a direct import of two cases was reported; this did not come on the market. Quotations rule about \$2.25 lb. (9*s.* 8*d.*) for small quantities; there is an import duty of 25 per cent.

QUININE has slightly improved, but more from the fact that manufacturers are not pushing sales, than from any improvement in the position of affairs; second-hand holders continue to meet the current wants at from 63c. to 65c. (2*s.* 9*d.* to 2*s.* 10*d.*) according to brand. The price of the large home manufacturers remains at 80c. (3*s.* 6*d.*) in vials and 73c. for bulk (3*s.* 2*d.*)

OIL PEPPERMINT has not altered in value. The position is very strong, especially taking into account that there remain six months before the new crop can be made available, and the season for consumption is approaching. True Wayne County oil in tins cannot be had in any quantity below \$4 25 (17*s.* 9*d.* net). Michigan is offering in a limited way at \$4.00 (16*s.* 9*d.* net).

SENEGA ROOT.—The market is decidedly weaker, owing to some large parcels, which were held for high prices, being now pushed for sale, one man with 10,000 lbs. of ordinary clean root, good Western quality, but bumpy, is especially anxious to get rid of it. Prime quality is worth 46c. (2*s.* 1½*d.*) nominally. Real good quality is very scarce, but common dark is in large supply at 43c. (2*s.*)

MEXICAN SARSAPARILLA.—Large arrivals continue to take place, but as price is about at lowest a large shipping-house here takes all offering, so that the market is firm at the rates ruling lately, say, prime Vera Cruz 10c. (52*s.*), Inspan quality 9c. (48*s.* 6*d.*)

HONDURAS SARSAPARILLA is in brisk demand for the Continent, and stock on the spot has been reduced to 550 bales. The "Carib," a brig which generally brings regular supplies, is expected first week in March with 171 bales, this being much below her regular cargo. Fair quality can be had at 30c. (1*s.* 6*d.*), but as high as 45c. (2*s.* 2*d.*) is regularly paid for fancy brands; the demand for this grade is mostly for Russia.

SERPENTARIA is higher, 60c. (2*s.* 8*d.*) being demanded by the parties who took over the stock of the "combination" in Texas. It is, however, a fact that the new may be expected in a month or six weeks, and unless dealers and collectors all over the district where it is got are members of the "corner," it is difficult to see how the price can be kept up.

OIL WINTERGREEN is tending lower, \$1.90 being now quoted in tins (8*s.* 3*d.*)

THE HOUSE OF LORDS AND THE SALE OF POISONS.

(Special Report.)

IN the House of Lords on Friday, February 26, the Earl of Milltown asked Her Majesty's Government whether, considering that a Bill upon the subject was read a second time in this House last Session and referred to a Select Committee, it is their intention to introduce this Session a Bill for regulating the sale of poisons. The noble earl said that it was probably within the knowledge of their lordships that a feeling of very considerable uneasiness existed in the country, in consequence of the very great laxity in the present regulations which governed the sale of poisons. That laxity afforded not only great facilities for the commission of the crimes of murder and suicide, but it was also the cause of not infrequent cases of accidental death. That feeling had been intensified of late by a case of a very remarkable nature, which was now before a public tribunal. He did not intend to say anything about that case, except to make the remark, that it disclosed the extraordinary facility afforded to persons absolutely unknown to the vendors for obtaining large quantities of the most deadly poisons. His noble friend Lord Carlingford, whom he was sorry not to see present, had, when President of the Council last Session, introduced a Bill upon that subject, and the measure was one of very considerable importance. Owing, however, to a custom which he was sorry to say was somewhat frequent in the House, of Bills being read a second time before their Lordships had had any opportunity of considering their provisions, the measure did not meet with a sufficient amount of debate on the occasion. He (Lord Milltown), however, took the opportunity of protesting against the course that had been pursued, and his noble friend very courteously put off the Committee stage of the Bill for a considerable period. For some reason or other the Committee did not sit, and the Bill eventually was allowed to drop. Under these circumstances, and as their Lordships were not at present embarrassed by any great plethora of legislation, he ventured to express the hope that his noble friend who now occupied the post of Lord President of the Council would reintroduce either the Bill of last session or a similar Bill. If the noble lord did so, as he hoped he would, he trusted also that the noble lord would take care to avoid some of the mistakes into which his predecessor fell, and that he would include in the provisions of the measure regulations controlling the sale of poisons by apothecaries, general practitioners, and veterinary surgeons, which were wholly omitted from the previous Bill. It was very natural that pharmaceutical chemists, who all their lives had been accustomed to the preparation and sale of these drugs, should feel aggrieved at their being singled out for special legislation, while other people who also sold such drugs in their ordinary trade should be left untouched. There was another point he wished to mention, and that was the omission of any precautionary measures relating to the sale of carbolic acid, a poison commonly sold in oil shops, in any kind of vessel, and to which was to be attributed more accidental deaths than those caused by the well-known and dreadful poison strychnine.

Earl Spencer confessed that he felt himself much relieved by the speech of the noble earl opposite, in comparison with the condition of mind in which he was before he heard it, for on looking at the newspapers that morning he read an announcement that on the previous evening the noble earl had introduced a Bill into their lordships' House, dealing with the sale of poisons, and that the Bill had been read a first time. He felt therefore somewhat to blame for not having been in his place on that occasion. With regard to the question the noble earl had now put, he wished to inform him that the Government were considering the question at that moment, and in a very few days he hoped to be able to inform the House when they intended to take up the subject by way of legislation. He would undertake, if such were their intention, to bring in a Bill on the subject, and to give plenty of time after the Bill was delivered and before it was read a second time for consideration on the part of the noble earl and his friends. He was afraid that at that moment he could go no farther.

The Earl of Milltown said that the Bill which he ventured to present to their lordships on the previous evening, and which was read a first time, was for the purpose of preventing the sale of church sites in the City for building purposes, and was not connected with the sale of poisons.

The Pharmaceutical Council.

MARCH 3, 1886.

OUR reporter was for some unexplained reason refused admission to the Council-room till twenty minutes after the hour of meeting. The President (Mr. Carteighe) was in the chair, and there were present fifteen other members of Council. These were Messrs. Allen, Atkins, Borland, Bottle, Butt, Churchill, Gostling, Hampson, Hills, Radley, Robbins, Savage, Schacht, Williams, and Woolley. Messrs. Richardson and Greenish arrived somewhat later.

The minutes of the last meeting were read. On reaching the letter which had been received from the Privy Council, the PRESIDENT, interposing, said, "A long letter from the Privy Council. This need not be read."

On coming to the letters from Scotland in reference to the appointment of the Secretary for Scotland which had been received last month, the PRESIDENT asked if these should be read. A response, "No; taken as read," was general.

Mr. HAMPSON said the minutes were not accurate, as they did not record that he had objected to the Council going into Committee when the letters from the Privy Council in reference to the by-laws had been read and discussed.

Mr. BOTTLE said if all objections were recorded the minute-book would become a very large affair. The emendation was, however, made.

THE CONVERSAZIONE.

The PRESIDENT said a letter had been received from the Science and Art Department expressing the willingness of the Lords of the Council to grant to the Society the use of South Kensington Museum for the evening of May 19.

FINANCE.

The Finance Committee's report was read. Details of the receipts and expenditure of the month were given. No discussion occurred on this report, which was adopted.

RESEARCH LABORATORY.

The report of the Library Committee, besides the usual details, gave the results of the discussions of the Committee on the subject of the proposed "research laboratory," which had been referred to them. It was the opinion of the Committee that such a laboratory should be established, and they submitted the following scheme of regulations:—

SCHEME FOR THE MANAGEMENT OF THE RESEARCH LABORATORY OF THE PHARMACEUTICAL SOCIETY.

Objects.

1. The laboratory is founded for the advancement of pharmacology by research, and shall be available for the purposes of investigation and research in chemistry and other branches of science relating to pharmacology to all persons who possess the requisite scientific knowledge and training.

Government.

2. The government of the laboratory shall be vested in the Council.

3. The management of the laboratory shall be under the supervision of the committee to be elected annually by the Council. The committee shall consist of the president, vice-president, and one other member of Council, assisted by three persons (not being members of Council) who shall be nominated by the Council.

4. The committee shall meet at least twice a year to transact such business as may be necessary for the proper management of the laboratory.

5. The laboratory shall be under the immediate management of a director, who shall be appointed annually by the Council. He shall be from time to time furnished on application to the committee with all the apparatus and materials

necessary for investigations. In carrying on research he shall be at liberty to employ an assistant approved by the committee.

6. The director shall be responsible to the Committee for the proper maintenance of the laboratory and shall at least twice a year submit to the committee a report of the work done.

Regulations for the Laboratory.

7. Any person who desires to assist in the researches undertaken by the director, or who wishes to pursue an investigation on his own account, may be admitted into the laboratory as a worker by the committee on the nomination of the director, to whom written application is to be made for the purpose. A worker who desires to remain engaged in investigation for more than one year shall renew his application for admission each year.

8. Each worker will be expected before his admission to satisfy the director of his competency, and if he wishes to undertake any particular investigation, he must also furnish a statement in writing of its nature and extent.

9. Every worker will be furnished with gas, water, materials, and apparatus. He will be expected to reinstate such apparatus as he may damage on being called upon by the director.

10. No inquiry having a direct commercial object shall be conducted in the laboratory.

11. The selection of subjects for investigation shall be left to the discretion of the director, assisted by the committee. All investigations shall be subject to the control of the director, and no research shall be undertaken that is not approved by him. But the director shall allow the utmost freedom to each investigator in the methods of research pursued, so far as these are consistent with the orderly government of the laboratory. The publication of research shall not take place without the sanction of the director or committee, and in all cases the words "Communication from the Research Laboratory of the Pharmaceutical Society of Great Britain," or their equivalent, shall be appended to the title of each paper.

12. A report of the work done shall be presented annually to the Council.

13. The director shall have power (for any sufficient cause) to order a worker to cease to use the laboratory at any time, or immediately. The right of appeal to the committee, whose decision shall be final shall be allowed in cases in which this power has to be exercised.

The PRESIDENT moved the adoption of the report, and in reference to the proposed research laboratory said the Committee had considered the whole subject *de novo*, and had come to the conclusions embodied in their report. He repeated his view of the work of such an institution. It would be probably desirable to investigate the properties of new drugs as they came forward. There were also a number of what he might term pharmaceutical remanets, such as the chemistry of aconite and aconitines, the active principles of belladonna, which had been investigated recently to some extent by Ladenberg, the question whether atropine was a single or a compound alkaloid, and so on. The laboratory would afford an opportunity for those students who might wish to go beyond the range of the usual studies to prosecute some researches.

Mr. CHURCHILL: Is there anything said about fees?

The PRESIDENT: Nothing about fees. He believed that the work done in such a laboratory would be regarded as conclusive by men of science; and having regard to this fact, and believing it to be the duty of that Society to promote pharmacy as much as possible, and so fulfil the purposes of a true guild, he asked the Council to adopt this report. The difficulty as to suitable premises, he added, would probably disappear in the course of six months or a year.

The VICE-PRESIDENT (Mr. Atkins) asked if the probable cost of this laboratory had been estimated.

The PRESIDENT said that without reckoning rent they estimated it would cost about 500*l.* a year. But of course that would depend a good deal on the number of workers who might be admitted. It was not desirable that there should be a great number, nor did he expect there would be many applications. They did not offer any remuneration except to the director and his assistant.

Mr. WILLIAMS seconded the proposal, but reserved approval

of all the details of the scheme. He thought it would be a pity if they tied themselves to the whole of the scheme.

Mr. RICHARDSON asked what was meant by the tenth clause, which excluded inquiries of a commercial character.

Mr. CHURCHILL said the business of pharmacists was to provide for the medical profession the purest drugs, but when they had done so they found half the profession preferred to prescribe Jones's or Smith's essences of this or that, and so the trade was drifting into becoming merely retailers of Smith's and Jones's specialties. It seemed to him that such a laboratory as the one proposed could do much service to the trade by taking such a substance as James's Antimonial Powder (to take one of the oldest), and see if it possessed any virtues; and if so, what they were. Such information would be much more interesting to the trade generally than whether atropine is a simple or compound body.

The PRESIDENT said the purpose of the tenth clause was only to exclude direct analytical work being undertaken by the director for private fees.

Mr. BORLAND asked what would be the position of the persons not members of the Council on this Committee.

The PRESIDENT said they would be advisers simply.

Mr. RICHARDSON suggested the possibility of getting Government aid for the Institution, as is often given on the Continent.

Mr. HAMPSON said that several points had already been raised which showed the need of further consideration of the details, and he would like it to rest for awhile, especially as it could not be proceeded with until they could get other premises. He did not take a sanguine view of the prospects of such a laboratory. The unsatisfactory experience of the Pharmaceutical Conference did not lead him to be very hopeful that the Society would gather sufficient results to compensate them for their outlay. At the same time the scheme was too good a one to oppose. If they had more to do with the preparation of the Pharmacopoeia they would have more reason for it. Perhaps this might be a means to that end. He urged that they should begin in a small way.

Mr. SCHACHT also urged further time for consideration. There were several points which wanted thinking about. There was the proposal to admit anyone as a worker. It might be right, but the proposition was somewhat startling.

The PRESIDENT said it applied to anyone approved by the Committee.

Mr. SCHACHT also questioned whether the scheme insisted sufficiently that the results of the work should be published.

The PRESIDENT said the scheme required that reports of the work done should be sent in.

Mr. ATKINS, like Mr. Hampson, felt that they should proceed at first tentatively. It was very easy to vote large sums, but they would need to give something more than money to attain their object.

Some more conversation ensued in regard to some of the features of the scheme. Mr. SAVAGE elicited that 500*l.* was merely the cost of maintaining the laboratory; Mr. SCHACHT that there was not likely to be any friction between this new laboratory and the older one; Mr. WOOLLEY questioned whether the Council would be retaining sufficient control over the management of the laboratory; and Mr. BORLAND thought they would not have sufficient hold of the results. Ultimately the report and recommendations of the Committee were unanimously adopted; but it was understood that the details of the scheme were left for longer consideration.

BENEVOLENT FUND.

The Committee's report recommended grants varying from 5*l.* to 15*l.*, and amounting in all to 85*l.* Mr. Atkins gave particulars of one case, in which it was proposed to assist in sending a widow and her son to Illinois, to two older sons who were willing to receive her; and Mr. Woolley spoke of another case, of an old lady who had in the past moved in good society, and who is now much reduced.

EXAMINATIONS.

The report from the Board of Examiners for the February examination of England and Wales showed that of 13 candidates for the Major, only 4 had passed; that of 103 candidates for the Minor, only 33 had passed.

Mr. GOSTLING asked whether the President and Vice-President were perfectly convinced that this large proportion of failures was entirely due to a want of proper proficiency on the part of the candidates.

The PRESIDENT said they were quite satisfied with the manner in which the examinations were conducted.

Mr. GREENISH said it would appear that the more the facilities were increased, the less prepared were the candidates.

ADDITIONS TO THE POISONS SCHEDULE.

A letter was read from Mr. Martindale in respect to the addition of nitro-glycerine to the Poisons Schedule. The tablets were the only official preparation of nitro-glycerine, and he knew of no recorded case of poisoning by them. He brought forward instances of two children, aged six and three, who had eaten two dozen tablets without effect, and of a dog to which he had given twenty-six tablets without doing him any injury. He urged that if nitro-glycerine should be added to the Schedule, the "tablets B.P." should be specially excepted.

Mr. Greenish to a great extent supported Mr. Martindale's expressions. He alone in the Council had objected to include nitro-glycerine in Part I. of the Schedule, and he still thought it absurd to make that addition.

A letter was also read from Mr. Wm. Young, of Brixton, protesting against the admission of lobelia to the Poisons Schedule. It had, he said, been taken in large quantities with impunity.

The Council then went into Committee to consider the report of the General Purposes Committee, and the President stated that there would be no more business. The proceedings up to that time had lasted one hour and a half.

Metropolitan Reports.

POISONED WITH STRYCHNINE.

ON February 23 Mr. G. P. Wyatt held inquests at the George and Dragon, St. George's Road, Camberwell, on the bodies of Martha Reddin and Mary Ann Hammerton, whose deaths were alleged to be due to a mistake made by a doctor's assistant in the dispensing of some medicine.

The case of Martha Reddin was the first one taken. Evidence was given by her husband, who stated that deceased had suffered from a cough, which was considerably relieved by a mixture which she had got at a dispensary. On Thursday night (18th) she had a second supply of the mixture; shortly after taking a dose of it she was severely pained, and in spite of Dr. Partridge's assistance died in the course of the evening. Dr. Partridge gave corroborative evidence. He suspected the case to be one of strychnine poisoning and prescribed accordingly; when he called a second time the woman was dead. Similar evidence was given in the case of Mrs. Hammerton, who had been supplied with the same mixture.

Dr. Foster, 420 Old Kent Road, stated that the medicine had been obtained in his dispensary, and was served by his assistant, Dr. William Allen, with whom he had no fault to find.

Dr. Allen deposed that he was a qualified man. He had served the medicine which caused the death of the two women. He had taken some of the medicine himself, and had felt bad. The thought of strychnine flashed across his mind. He took upon himself the responsibility of the affair, as he had the management of the drugs. He expressed his sorrow for the injury done to his employer, Dr. Foster, and also to the relatives of the deceased. The only way that he could account for the mistake was that the strychnine might have been placed in the bottle when the drugs were being changed, and in that case the label on the bottle could not have been altered.

The Coroner summed up at great length, and the jury returned a verdict of "Death from misadventure" in both cases. At the request of the jury the Coroner severely censured Dr. Allen for extreme carelessness.

Mr. Reddin stated that he intended taking proceedings against Dr. Allen.

ALLEGED ATTEMPT TO POISON BY CHLOROFORM.—At the Wandsworth Police Court, on February 27, a young woman named Alice Amelia Tharly was charged with attempting to poison Mrs. Rose Hannah Darling, a widow lady, who was staying with her son-in-law, Dr. Horace Bayfield, of Somers

Villas, Lavender-hill, Battersea. The evidence went to show that the poison was administered in a cup of tea which the prisoner had prepared for Mrs. Darling. She became very ill, and only recovered after medical assistance. Dr. Bayfield stated that the tea tasted of tincture of opium, and the milk which was used for the tea smelt strongly of chloroform. He had missed a quantity of both of these drugs from his surgery. Corroborative evidence was given, and the prisoner was remanded to give opportunity for analysis of the tea and milk.

Provincial Reports.

LEICESTER.

FORMATION OF A CHEMISTS' ASSOCIATION.

A PRELIMINARY meeting of the Leicester chemists was held on Feb. 9, and an adjourned meeting on Feb. 23, for the purpose of forming an association of chemists to protect the interests of the trade, and to promote the educational interests of the assistants and apprentices. At both meetings Mr. J. G. F. Richardson presided, and the proceedings were of a most harmonious nature. On behalf of the Assistants' Association Mr. W. B. Clark stated that the Association would hand over all its property to the new organisation if certain conditions were agreed to. This offer was accepted with cordiality, and after the meeting had thoroughly discussed the possibilities of non-success, and the lines in which the best results for all would be obtained, it was proposed and agreed "That the name of the new society be the Leicester and Leicestershire Chemists' Association."

A number of subscriptions were promised, including a donation of five guineas from Messrs. J. Richardson & Co.

The following gentlemen form the first Committee:—Messrs. Richardson, Lloyd, Broof, Rowe, Young, Garratt, Thirlby, Burford and Edwards.

LIVERPOOL.

STEALING DRUGS.

ON March 1, at the Police Court, before Mr. Raffles, stipendiary magistrate, David James Weaver, twenty-one years of age, and James Sinclair, thirty-five, both of highly respectable appearance, the latter carrying on business as a chemist and druggist in Ellesmere, were charged on remand, the former with having stolen a quantity of drugs, valued at 50*l.*, belonging to Messrs. Evans, Son, and Co., wholesale chemists and druggists, Hanover Street, Liverpool, and Sinclair with feloniously receiving the same. Mr. Marks prosecuted; Mr. Pickford (instructed by Messrs. Gill and Archer) appeared for Sinclair, and Mr. Broadbridge represented Weaver. At the outset of the case, Mr. Pickford said the prisoner Sinclair had borne a very high character, and for many years had occupied positions of more than respectability. He was a churchwarden at Ellesmere, and a member of the Council there. For some time he had been in Messrs. Evans' employ, and they considered him an upright and diligent man, but not a clever one, and that was the explanation of the difficulty in which he now found himself. It seemed to him (Mr. Pickford), and he was bound to say, that his client had been guilty of great folly and culpable negligence, enough to justify the prosecutors in making the charge and having it investigated. But from what he and Mr. Broadbridge had told Mr. Evans, that gentleman was satisfied that this might have been done honestly, although very negligently, and therefore he authorised him to say that he wished to withdraw the charge against Sinclair on that ground.

Mr. Raffles.—Yes.

Mr. Pickford said there was no trace of any arrangement or anything approaching a compromise.

Mr. Raffles.—If Mr. Evans says this has not been done dishonestly by him there is an end of the case.

Mr. Pickford repeated that there was no arrangement of the case, and no "squaring" of any kind.

Mr. Marks said he did not oppose the withdrawal of the charge under the circumstances, and the prisoner Sinclair

was then discharged. The case against Weaver was then proceeded with, and from the evidence given it appeared that he had been an assistant in the employ of the prosecutors for the last five years. Sinclair was his uncle. On the 22nd inst. another assistant employed by the prosecutors missed from the counter of which the prisoner had charge twelve bottles of chlorodyne. Search was made for them, and they were found in the pockets of the prisoner's overcoat, together with half-a-dozen boxes of patent pills. Weaver was then given into custody. He had no authority to take any drugs, and those found in his pockets were worth at wholesale prices 17. 1s. 9d. Mr. Marks said that a considerable quantity of drugs, disposed of by the accused at about half their value, had been traced, although the prisoner denied that he sold any but to his uncle. Prisoner, who pleaded guilty, was sent to gaol for six months with hard labour.

THE REGISTERED CHEMISTS' TRADE ASSOCIATION ANNUAL SUPPER.

THIS festivity was held on February 10, in the Exchange Hotel. The chair was occupied by Mr. Councillor J. Woodcock. After an excellent supper, a comprehensive toast list and an attractive musical programme were gone through. In proposing the toast of the evening the Chairman said the Association had not merely a local interest, but had spread its influence far and wide, and there were many chemists who appreciated its efforts to sustain the commercial side of pharmacy. The Liverpool price list was a monument of the usefulness of the Association, and the earlier closing of some establishments testified to good results; moreover the Association had contributed to the funds of the National Trade Association, and this showed that it had the good of the whole trade at heart. The toast was most heartily received, and Mr. J. Hocken, hon. sec., replied.

Mr. J. J. Smith proposed "The Liverpool Chemists' Association and kindred Associations," and Mr. A. C. Abraham responded.

"The Pharmaceutical Society of Great Britain" was proposed by Mr. Dickens (Vice-President), who said they had a member of the Council among their number, and consequently their representations were immediately presented at headquarters.

Dr. Symes, in responding, said he was fully aware that the Pharmaceutical Society or its Council did not give universal satisfaction, but it must be remembered that they had to watch over the interests of the public as well as over the interests of pharmacy. It had often been said, "Let the public take care of itself—it was quite capable of doing so." With all deference to those who held this view, he maintained that unless the Council duly considered public interests, the power which it now possessed would soon pass out of its hands, and would be exercised by others with less partiality. He would like to see a more complete report of the Council proceedings. He had always advocated this, and should continue to do so whenever an opportunity presented itself. He held that not only the members of the Society, but the whole commonwealth of pharmacy, ought to know more of the work which was now done in committee, and which was not published. There should, in his opinion, be less diplomacy and a more complete endeavour to enlist the views and sympathies of the whole trade on matters which concerned their interest.

Amongst other toasts were "The Chemists and Druggists' Trade Association of Great Britain," "The Wholesale Trade," "The President," &c. In replying for the wholesale trade Mr. Evans referred to the "Sweet Spirit of Nitre" case, reported elsewhere, and said that his firm would do its best to protect the interests of retailers.

MONTSERRAT LIME JUICE.—The *Hilda* has just reached the Mersey from Montserrat, her entire cargo, consisting of 50,000 gallons of lime juice, being the first arrival of the new crop. During the past twelve months the sole consignees, Messrs. Evans, Sons & Co., wholesale druggists, have sold 180,000 gallons of this now universally popular product.

COCAINE AS A REMEDY FOR SEA-SICKNESS.—At a recent meeting of the Liverpool Chemists' Association Mr. R. M. Sumner read a paper in which he gave his personal experience of the use of cocaine as a remedy for sea-sickness. After quoting the experience of Professor Manassein, of St. Petersburg, which went to show that cocaine is undoubtedly a reliable

remedy in teaspoonful doses of a 1 in 1,000 solution, Mr. Sumner said that frequent trips across the Irish Channel had given him an ample acquaintance with *mal-de-mer*. He therefore determined to test the proposed remedy. After a bad outward trip, when returning, the weather continuing boisterous, he had 3 grains of cocaine hydrochlorate dissolved in $\frac{1}{2}$ ss. of water. Of this solution he took one-third = 1 grain, upon rising at 7.30 A.M. and before dressing; this with the view of giving it a fair chance to compose the stomach before food was taken. He breakfasted as usual, and more carelessly than he would otherwise have done (in nowise eschewing fat or stinting liquid, &c.), and sailed at 9.30, upon a thoroughly nasty morning, against a heavy sea and a side wind. Shortly after starting he took a second grain of cocaine, and never for one moment of the trip was he in the slightest doubt of the full power and success of the remedy. For the first time in his life he positively enjoyed the motion of the vessel, which on that day consisted of long steady rolls, with that peculiarly aggravating pitch towards the end of each which is warranted to upset more unfortunates than any other combination known. It will be observed that in this trial he took a materially larger dose than any employed by Professor Manassein. On a recent trial Mr. Sumner used a solution in camphor-water, and again took one-grain doses; but he does not recommend this form, owing to the taste of the camphor, and deprecates the use of solutions owing to their cumbrous nature. He has proved that all the benefits which he had derived from 1 grain of cocaine in aqueous solution are obtained from two to four $\frac{1}{12}$ -grain lozenges. On this point he remarks:—"The lozenges contain $\frac{1}{12}$ grain of cocaine hydrochlorate, and are at once active, palatable, portable, and I believe permanent. Upon a third and last expedition I made use of these, and purposely refrained from taking any until the old familiar pain in the temples and top of the head, coupled with gloomy views about dinner and a fierce desire to get at the engineers who make such a confounded smell of warm oil upon a steamer just when an unhappy man feels that, as Artemus Ward has it, 'the Krisis is onto us,' until symptoms such as these, sufficiently well known to you all, warned me to settle quickly with mine adversary. So I ate two lozenges, and in twenty minutes laughed at him. Nay! I ate two more and bearded him in his den; going with a book to the cabin and staying half-an-hour in that 'chamber of horrors,' whence I came again, warned in body and triumphant in spirit, to smoke the pipe of peace above. Think of it, ye sea-sick smokers! Here it will be seen that the dose was further reduced to $\frac{1}{3}$ grain; and less than this, I am of opinion, will hardly answer in the majority of cases. I believe that the centesimal doses of which we have read will not bear the test of practical experience."

SCOTLAND.

MR. P. MACEWAN, late Secretary to the Pharmaceutical Society in Edinburgh, was entertained at supper on Feb. 18 in the Windsor Hotel prior to his departure from Scotland to join the Editorial staff of THE CHEMIST AND DRUGGIST in London. About forty pharmacists from town and country assembled. Mr. John Nesbit, President of the North British Branch, occupied the chair; Mr. William Gilmour was croupier. In the course of the evening Mr. J. B. Stephenson, in the name of the company and of subscribers in various parts of Scotland, handed to Mr. MacEwan a testimonial in recognition of his great services during his tenure of office. The movement had originated with the Board of Examiners, but others had wished to take part in it. Pleading the example of Lord Rosebery, who gave wedding gifts in the form of cheques, the speaker handed to Mr. MacEwan a cheque for fifty guineas, and, after describing the eminent services he had rendered to the Society in Scotland, proposed as a toast "The Guest of the Evening," which was drunk with much enthusiasm. Mr. MacEwan, in cordial terms, expressed his thanks, and subsequently proposed "The Chairman," recording his appreciation of the honour he had done him by coming to preside on the occasion, notwithstanding that he was in delicate health. Many other toasts were given, and speeches were made by Messrs. Gilmour, Maben, Ainslie, Henry, Watt, Howie, and Pinkerton. The evening was wound up by a hearty rendering of "Auld Lang Syne."

A presentation, consisting of Watts' "Dictionary of Che-

mistry," in nine volumes, a gold pencil-case, and a set of writing-table requisites, was made to Mr. MacEwan by the Edinburgh Chemists' Assistants' and Apprentices' Association.

The chemists of Dundee, under the presidency of Mr. Charles Kerr, President of the local Chemists' Association, also entertained Mr. MacEwan at a dinner before his departure for London, and united in kind and complimentary speeches.

Mr. A. L. Laing, of Lauder, has sold his business there to Mr. Hogg, of Earlston, and is to open another pharmacy in Lerwick.

EDINBURGH.

Mr. A. G. Laing, Leith Walk, has closed his pharmacy. The Proctor method is beginning to tell.

A CURIOUS CALCULATION.—A correspondent informs us that from Minto Street to the foot of Leith Walk there is one chemist to every three lamp-posts.

The Assistants' Association meet on Wednesday evening first in 36 York Place. Mr. Thomas Stephenson will give a lecture on "Microscopic Forms of Plants," with lantern illustrations.

Very great satisfaction is expressed by most of the Edinburgh chemists that *THE CHEMIST AND DRUGGIST* is now to appear weekly. Hitherto its monthly appearance has been a welcome pleasure, and in these dull times, when our best efforts fail to produce an increase of business, we shall be only too glad to have our pleasures increased, especially when they are to be enjoyed without any additional expense to us.

Urethane, the new hypnotic, is being fairly tried in hospital practice here. The results so far are said to be satisfactory. If these be maintained by further experience, this drug may be more frequently seen in prescriptions than it is at present.

Dr. James A. Sidey, one of the best known Edinburgh physicians, died on the 24th ult. He was a busy and much esteemed practitioner, having had a very large practice among all classes of the community. For a good many years he held the appointment of Surgeon to the Prison. In 1868 he published a volume of *Lilts and Lyrics*, under the title of "Mistura Curiosa." Some of these songs are delightful. A second volume of similar songs, issued in 1876, bore the title "Alter Ejusdem." It contains some very humorous pieces.

The following circular has been issued:—"North British Branch of the Pharmaceutical Society of Great Britain, 73 Princes Street, Edinburgh, March 1, 1886.—Dear Sir,—You are particularly requested to attend a preliminary general meeting of the members and associates in business of the Pharmaceutical Society resident in Scotland, which is to be held in the hall, 5 St. Andrew Square, on Wednesday, March 10, at 12 noon, to consider the present extremely critical condition of affairs in this branch of the Society, arising out of the recent action of the Society's council.—I am, your obedient servant, H. Bellyse Baildon, Convener of Committee."

ANNAN.

DRINKING VITRIOL BY MISTAKE.—A little boy, named T. Harkness, aged 4½ years, son of a joiner, on Monday afternoon, February 15, under the impression that the fluid was lemonade, drank about a wineglassful of vitriol out of a bottle.

GLASGOW.

Sheriff Lees has awarded 60*l.* damages to Margaret Sinclair, a girl of five, who was in September last run over by a horse and van belonging to the Globe Company of Manufacturing Chemists and Aërated Water Manufacturers. The sheriff stated that half of the award would be required for medical expenses, otherwise it would not have been so high.

What a time of it we are having here over these vexed "Patents." Go where you please, into "Surgery," "Medical Hall," "Apothecaries Hall," or "Chemists," the first thing to catch your eye is a notice "Patent Medicines at Wholesale Prices," while one or two members of the trade have the enterprise to put up "Patent Medicines *under* Cost Prices." Windows which hitherto have had no occupants except the stereotyped brown and white specie jars, with a couple of coloured carboys, have now become crammed with Atkinson, Eno, Cuckle & Co., each with their ticket of "old and new notation," so that with the reduced prices these gentlemen and many others have got a prominence for their wares which they

did not hitherto enjoy. It is a true Scottish saying that "It's an ill wind that blows naeboddy gude."

After a five months' trial of the low prices it may interest your numerous readers to know what the true feeling is here as to the wisdom of having reduced all patent and proprietary articles which the grocers keep. Of course there is much diversity of opinion, and a good deal of grumbling at the loss of profit. When you meet a chemist who was opposed to the reduction, but who of course has had to give in to the majority, and ask him how he is getting on, he still adheres to his old argument, that he was better by selling one article at the old price, than six at the reduced, and that, therefore, they should never have been lowered. Nothing will convince him that there was a probability of this one purchaser also finding out that he could buy cheaper at the grocer's, and so follow the other five there. Another chemist tells you he is selling nearly double the patents he used to sell, and his only regrets are that they were not reduced years ago. Another boasts that he still manages to get full price, but he adds, he does not sell so many. While a fourth admits he is selling a few more than he used to do, but on account of the increased sale he grumbles at the increased loss of profit; he never for a moment considers that it is only owing to the reduction of prices he sells more. When you take the opinions of chemists in the centre and west end of the city who have been most affected by the grocers, you find they are unanimous in saying that they are selling from a fourth to a half more patents than they have done for a year or two, whilst they find themselves on a much better footing with their customers.

A new edition of the Glasgow Chemists and Druggists' Retail Price List is in the press, and will be for sale about the middle of the month. The Committee have carefully revised all prices and made many important additions. The Committee at their recent sittings decided to meet quarterly in future to revise prices and make additions, and thus they hope to cope with the fluctuations of the market. A novelty in this year's list will be a request to the members of the trade to bring any grievance or suggestions as to prices under the notice of the Committee, when they will consider them at their subsequent meeting. The list will, as heretofore, be obtainable through any of the wholesale houses, or from the Secretary, Mr. Joseph A. Clarke, Gallowgate.

Spring-tide has brought with it the average number of business transfers and new starts. Mr. John McNicol, late assistant with Mr. McMillan, Hillhead, has purchased the business belonging to Mr. J. Brodie Hatrick, Paisley; and Mr. Miller, from Messrs. Duncan, Flockhart & Co., Edinburgh, has purchased the business of Mr. C. Flint, Byars Road. Mr. Gordon, presently assistant with Messrs. Brown Bros., Trongate, will shortly open a new shop in Partick; and Mr. Hunter, presently assistant with Mr. McOwan, Paisley, will shortly open a new shop in High-street there.

Several Scotch businesses are at present for sale, including that of Mr. Gilbert Farie, Bridge-of-Allan; the business of the late R. A. Taylor, High Street, Perth, and the late Jesse Fletcher, 44 Trongate, Glasgow. In connection with the latter there is a museum and surgery. The museum consists of a most valuable collection of statuary and life-size wax figures, British and foreign birds, and a rare collection of fossils and shells in cases, diagrams, and engravings. The surgery is well fitted up, and contains a large quantity of herbs and medicines.

Mr. John S. Pinkerton, chemist and druggist, 248 London Road, died on February 17.

Mr. Robert McDonald, chemist and druggist, Trongate, has suspended payment. The liabilities are said to amount to between 800*l.* and 900*l.*, which includes 200*l.* for arrears of and current half-year's rent. The assets are about 400*l.*

MASTER AND APPRENTICE.—A question of some interest was decided on February 8 in the Inverness Sheriff's Court. James Keith Macgregor was apprenticed to Mr. Lawrence, chemist and druggist, Oban, in January 1864. After some time Mr. Lawrence had occasion to complain of Macgregor's unpunctuality and negligence. Letters were written to his father, and the lad was allowed to stay on in the hope of his amendment. In addition to the general complaint articles were missing from the shop when under Macgregor's charge. On several occasions it was found that some bottles of aërated

water had been taken, and at last defender told Macgregor and an errand boy that they need not come back until they could account for them. A few days after the defender wrote offering to receive the youth back on promise of better behaviour, but his father refused to allow him to return and raised this action. The Court expressed the opinion that Mr. Lawrence's action was quite justifiable, that it was not intended finally to terminate the apprenticeship, but to impress upon the lad the necessity of some reform. There was no occasion to raise any action to clear the lad's character from a charge of theft. It was not a class of offence to which the word theft could be properly applied. The lad was neither better nor worse than fifty out of every hundred lads would have been under similar circumstances, but he was not as careful of small things which he was responsible for as he should have been. The Court considered that defender had been actuated solely by a desire to honestly fulfil his contract, and do what he believed to be his duty towards the lad and the lad's parents. The claim for 50*l.* damages was dismissed, and the defender was allowed expenses.

SOUTH SHIELDS.

MASON & CO.'S MISTAKE.—The mistake of giving tincture of iron instead of tincture of rhubarb, which cost Messrs. Mason & Co. 5*l.* and costs, as reported in our last, was incorrectly described as "a chemist's mistake," Mason & Co. being general dealers and cutting patent medicine vendors, and un-registered. Several correspondents have called our attention to this fact.

PHARMACY IN AUSTRALASIA.

(FROM OUR OWN CORRESPONDENT.)

MELBOURNE, VICTORIA, Jan. 8.

THE pharmaceutical event of most interest to your journal, and perhaps of not much less importance to the colonies themselves, has been the establishment of your branch journal, *THE CHEMIST AND DRUGGIST OF AUSTRALASIA*. The first number appeared on New Year's Day, and was circulated to every pharmacist in all the eight colonies.

STATUS.

In accordance with your wish I present a concise summary indicating the official position occupied by pharmacy throughout the Australasian Colonies.

Taking the colonies in the order of their geographical position, we have first Queensland. Until last year chemists were required to be registered by the Medical Board under the Medical Act, 1867, and a list was published annually in the Government *Gazette* setting forth the names (without addresses) of all so registered. By the Pharmacy Act, Queensland, assented to December 16, 1884, the Governor was empowered to appoint a Pharmacy Board, to consist of seven persons, either registered chemists, or legally qualified medical practitioners, who are to hold office till the last day of this year, and are then to be elected according to regulations. This Board has been appointed, and has ready the new Pharmaceutical Register of Queensland, also the syllabus of the examinations which must be passed by all who are not registered under the Medical Act, or do not possess the diploma of the Pharmaceutical Society of Great Britain, or of some other body recognised by the regulations.

These documents have to be submitted to the Premier, the Hon. S. Griffiths, as representing the Government; and unfortunately he is so occupied with matters arising from the cholera scare, which has occupied the public mind for the last few weeks, that there is little chance of pharmacy securing his attention for some time to come. The credit of forcing the Pharmacy Act through Parliament is awarded on all sides to Mr. C. H. Fletcher Yeo, the hon. secretary to the Pharmaceutical Society of Queensland, though, of course, it is recognised that he received loyal help from the president and other officers of the Society.

In New South Wales the Pharmaceutical Society is taking steps to get itself incorporated in order to give it permanence and stability. Notice has been appearing in the Government *Gazette* for some weeks, and Parliament will be moved to give effect to the Bill as soon as the present crisis is over-

past and the change of Government fairly effected. Your representative was received with great cordiality when he visited Sydney, and the branch journal will publish the official reports of the Society.

In Victoria pharmacy seems to flourish. Its votaries have managed to attach themselves to Government in a way that must be envied by their less fortunate *confrères*. You are aware that the Government has been persuaded to grant the Pharmacy Board and the Pharmaceutical Society a commodious building, formerly used as a county court. A trifling payment was made, so that the gift should not afford a precedent for similar bodies to demand like benefits from the State. This year the treasurer placed on the estimates a grant of 1,000*l.* for the College of Pharmacy, which was passed without debate, and will be available before this letter reaches home. The circumstances of the time make it very probable that the grant will become annual. Parliament is about to be dissolved, the three strongest men in it retiring from political life, and it is extremely unlikely that their successors will be able to resist the plea, "Your predecessors gave us the grant."

The Pharmacy Act Amendment Act, Victoria, has passed without amendment. It increases the power of the Pharmacy Board and the Registrar in many particulars. It also compels a master to grant his apprentice, in the last year of his apprenticeship, reasonable time to attend the lectures required by the curriculum, and makes failure to do this a breach of the contract of apprenticeship. Apprentices will now be required to pass the Preliminary examination before apprenticeship. It is made compulsory to attend one course of lectures, and to pass an examination, in one session, in materia medica, chemistry, botany, and practical chemistry, and the practical pharmacy examination may now be held before examiners instead of before the whole board.

The policy of the Society indicated by the assumption of the title "of Australasia" in place of its original title "of Victoria," is carried out still further by the omission of the latter words wherever they occur in the original Pharmacy Act. Anyone who has carried on the business of a chemist and druggist for the dispensing of prescriptions for two months before the passing of the Act in 1876, provided he can find in any colony a justice of the peace or a legally-qualified medical practitioner to declare the same, can be registered as a pharmaceutical chemist by the Pharmacy Board of Victoria.

In Tasmania at the present time the only registration of pharmacists is in the hands of the Court of Medical Examiners, who act on by-laws approved of by the Governor in 1849 and 1861. This body has power to grant letters testimonial of being a qualified medical practitioner, and a licence to practise as a dispenser of medicines. For the letters testimonial the candidate is required to prove that he has received a medical education equivalent to that prescribed by the regulations of the Royal College of Surgeons, England, and is examined by the Court to see if he is competent. This examination is rarely held now.

Any person applying for a licence to dispense medicines, must prove that he has been engaged during three years as an apprentice or otherwise in dispensing medicines, and that he is acquainted with the appearance, doses, uses, and effects of the medicines in general use, as well as the symptoms produced by the common poisons and their antidotes. The fee for this examination is 2*l.* 2*s.*, and the examinations are held to suit the convenience of the candidates. Persons registered in Victoria are admitted to registration in Tasmania on payment of 5*s.* This is the most modern part of the scheme; all that has gone before is dated 1849, the only alteration made in 1861 being to require candidates for the licence to dispense, to show that they possess an elementary knowledge of chemistry (Wilson's Chemistry), and of the Latin language (Caesar, *De Bello Gallico*), and to produce satisfactory certificates of their moral character. The Board consists of seven members, the Hon. J. W. Agnew, M.D., being the honorary secretary, and meets at the General Hospital, Hobart, four times a year. We understand that it will offer no opposition to efforts that are being made by the Chemists' Association to get the management of the examinations transferred to their own hands. Mr. J. T. Weaver, of Hobart, is secretary to the Association.

In South Australia a Pharmaceutical Society has been formed which promises to flourish vigorously in spite of the

depression so much complained of in the colony. Half-yearly examinations are to be established for assistants and apprentices respectively, and steps are being taken to secure rooms for a library and museum.

COMMERCIALLY,

there is little definite to report. The change of Government in New South Wales, alluded to above, has brought to the front again the question of free trade and protection, and the politician who is at present mentioned as the probable premier, although a free-trader, has spoken in a way to suggest some advance in the direction of modified protection. Should such a policy be adopted, one great obstacle would be removed to a fiscal union of all the Australasian Colonies, implying free trade amongst themselves and protection against all the world. The first attempt at such a union, a treaty between Tasmania and Victoria, was "talked out" in the last weeks of the expiring Parliament.

EXHIBITIONS.

An exhibition will be open in Perth, Western Australia, at the time this reaches you. A jubilee exhibition to celebrate the foundation of the colony of South Australia (which, by-the-by, is unique in its history among the Australian Colonies), is to be held at Adelaide in 1887, and great preparations are already being made.

CUSTOMS DUTIES.

A Customs Act giving the force of law to the new tariff was passed by the South Australian Parliament before it adjourned for the Christmas holidays, but the text has not yet been received.

In Fiji the Customs Duties Ordinance (1883) fixes the duties on drugs, perfumery, and fancy or medicated soaps, at 15 per cent.; on aerated and mineral waters at 9*d.* per dozen pints; on opium and all preparations at 15*s.* per lb.; on spirits of all kinds, 14*s.* per liquid gallon; on sponge, at 10 per cent. *ad valorem*; and on all unspecified articles at 5 per cent. *ad valorem*.

By recent decisions of the Commissioner of Customs of Victoria the duty on Pinaud's Brilliantine, ext. ergotæ liq. containing alcohol, and aroma of hops containing 26 per cent. of alcohol, has been fixed at 12*s.* per gallon; on collodion, containing 20 per cent. of methylated alcohol, 1*s.* per gallon; on borax, dry soap, and borax extract at 20 per cent.; and on Hewlett's "mist. pepsin c. bismutho," at 25 per cent. *ad valorem*. Unmedicated pilules, sago flour, as the material from which sago is manufactured, fine varnish analogous to turpentine, and black varnish are to be admitted free.

BISULPHIDE OF CARBON.

Attention has been called to a case in which the regulations for the insurance of ships have been infringed with reference to bisulphide of carbon. This dangerous liquid is largely used out here for the destruction of rabbits. A quantity is poured into the burrow, which is then stopped, and the heavy vapour following all the intricacies of the burrow, poisons all its inmates. It has been very difficult to get ships to carry this article at all; whenever it is accepted as cargo it is placed on deck, and power is reserved to throw it overboard should necessity arise. Some years ago Messrs. Felton, Grimwade & Co., Melbourne, erected extensive plant for the manufacture of this article. Other chemical manufacturers followed; but to their surprise all were defeated in a public tender by a firm that did not profess to manufacture the article, and yet had secured a large quantity. It is alleged that this was managed by shipping the bisulphide as sheep dip, but on deck, and with the usual liberty to jetson it if necessary. It is considered that the only persons aggrieved, now that the goods are safely landed, are the underwriters on your side, and any action must be taken there.

TEMPERATURE.

Yesterday the north wind was roaring round the building like a north-west gale at home, only the temperature was 100° Fahr. in the shade, and the wind was so dry that on meeting it when bathed in perspiration it chilled one as if it had been cold. To-day we have steady, gentle rain, and the temperature is about 65° Fahr.

A CHEMISTS' DEFENCE ASSOCIATION.

I learn from Christchurch, province of Canterbury, New Zealand, that a movement has arisen for the establishment of an association for the province, on the lines of the Chemists and Druggists' Trade Association of Great Britain, to look after trade interests, properly enforce the Pharmacy Act, and suppress illicit trading in poisonous articles. The adjourned meeting was to be held to-day, but news will not reach me for another week at the earliest. This idea of a society to each of the old provinces (these divisions have been recently abolished) may solve the geographical difficulty that destroyed the Pharmaceutical Society of New Zealand, and form the best organisation for pharmacy in that colony. Englishmen do not realise that it is as far from Melbourne to New Zealand as it is from England to Norway, and that Auckland is six days' journey from Dunedin.

DISPENSING TESTED.

An Inquiry into the accuracy in Dispensing of Medicines from Physicians' Prescriptions. By EDWARD SEATON, M.D., Medical Officer of Health and Public Analyst for Chelsea, and OTTO HEHNER, F.I.C., F.C.S., Hon. Sec. to the Society of Public Analysts. Report submitted to the Vestry of the Parish of Chelsea.

THE reports of analysts appointed under the "Food and Drugs Act" indicate that the drugs at present in the market and sold by chemists and druggists are usually genuine, and free from important adulterations. This has been our own experience, and we may say at once that our present inquiry has tended to confirm the impression that the drugs sold and dispensed by chemists and druggists are genuine. Our inquiry was not undertaken with a view to determine this, but for the purpose of ascertaining whether the quantity of a drug ordered in a physician's prescription is usually dispensed with accuracy. This subject has as yet been very slightly investigated. In 1876 Mr. A. H. Allen, the public analyst for Sheffield, made some very important observations in a quarterly report to the Town Council, giving the results of his analysis of some medicines dispensed from physicians' prescriptions. Later on in the same year we find in THE CHEMIST AND DRUGGIST of April 15 a highly interesting paper by Mr. Thompson, of Manchester, "On the degrees of accuracy displayed in the dispensing of physicians' prescriptions by chemists and druggists in different towns throughout England and Scotland."

Our inquiries commenced in July, 1885, and have been in progress up to the present date. During the seven months that we have been working at this subject we have sent fifty prescriptions to different chemists and druggists, and have analysed the medicines, tabulating the results of our analyses. The shops and establishments to which we have sent our prescriptions have been chiefly in the Chelsea parish (which comprises not only the part generally known as Chelsea, but also the populous district of Kensal Town). In this parish and neighbourhood are included all varieties of shops, excepting perhaps such as might be found in the very poor districts of the East-end of London. Our list, therefore, includes chemists and druggists of all grades; but in order to make the inquiry more complete, we have sent prescriptions to some of the well-known firms in the City and West-end, whose names were not already on our list, and also to the co-operative stores. These latter establishments are, it is well known, at the present time actively competing with those who keep shops as chemists and druggists, and therefore it is quite obvious that any inquiry into accuracy in dispensing must in fairness be extended to those establishments, to which so many people take their prescriptions to be made up.

With the exception of six samples which we obtained through other trusted agents, all the medicines have been obtained through the inspectors of the Chelsea Vestry, who are officials accustomed to take samples under the Food and Drugs Act. The inspector on receiving the prescription has in each case immediately taken it to be made up, the medicine has then been delivered to ourselves personally, and in all but a few cases in which we have been obliged to use the

whole quantity for analysis, a portion of the medicine remains in safe keeping. Each medicine is in a separate compartment of a locked box at our laboratory. In almost every case the druggist's name, also the number and date of the prescription, is upon both the bottle and the prescription. We do not propose to publish names of those to whom we have sent prescriptions, as our inquiry is of a general and impersonal character. We are quite prepared to submit the samples we have retained to a proper authority.

It would be out of place for us on the present occasion to enter into any technical details of our methods of analysis, but as we have been going over comparatively untrodden ground, it should be mentioned that we have for the most part confined ourselves to the estimation of substances for which accurate and trustworthy methods of analysis are in existence; that we have checked the results obtained by one method by those obtained by other methods; and that when we have had any reason to doubt the reliability of a method, we have conducted a series of experiments with a view to determine the exact extent to which it might be trusted, and to eliminate all sources of error in recording the results of our observations. We have also applied qualitative chemical tests to detect any possible impurity or adulteration of the drugs, and in the case of the sulphate of atropine solutions we have proved the substance to be genuine by observing its well-known action on the pupil of the eye.

We give in the form of an appendix a table showing the prescriptions and the numbers of the samples of medicines made from those prescriptions, the drug which has been estimated, and in the case of those which exceeded a limit of 10 per cent. error, the amount of error over or under the quantity ordered. We have it on the authority of a firm of chemists and druggists of very high standing that an error in dispensing of as much as 5 per cent. over or under the amount of the drug prescribed ought not to be permitted. If we consider that the money charge which is usually made for medicines is such that (taking the comparatively small cost of the drugs into account) the price paid must be mainly for the skill and care required in accurate dispensing, the above limit is a reasonable one, and we do not think it ought to be exceeded. But allowing a wider margin of error, and setting the limit at 10 per cent., over or under the amount of the drug prescribed, we find this limit to have been exceeded in seventeen out of our fifty samples, that is in 34 per cent. Taking a still wider margin, namely 20 per cent., we find that in eight out of fifty, or 16 per cent., it has been exceeded. In our opinion some of these errors are serious from a medical point of view, and we think it advisable to indicate the character of the shops or establishments at which the medicines were dispensed, and in which our analysis shows that there has been serious error. The number of medicines made up at chemists and druggists' shops of all kinds was 30, and amongst this number there were only two cases of serious error. The number made up at the co-operative stores was 14, and amongst them were three cases of serious error. The number made up at "doctors' shops" was two, one of which showed a very gross error. The number made up at "drug companies" was four, three of which exceeded the outside limit of 20 per cent. error.

Table showing the Cases in which the Amount of Error exceeded 20 per cent., and the Class of Establishments at which Medicines were Dispensed:—

Letter indicating the Prescription	Number of Sample	Drug estimated	Amount of Error		Description of Establishment at which the Medicine was dispensed
			Above	Below	
C	5	Hydrargyri Perchloridum	32%	—	Chemist and druggist, Chelsea.
D	35	Ferri et Ammonii Citras	—	51%	Co-operative stores.
	37	Ferri et Ammonii Citras	—	29%	Iditto.
E	10	Ferri Sulphas ..	—	85%	"Doctor's shop."
G	14	Hydrargyrum cum Creta	—	23%	Chemist and druggist.
	15	Hydrargyrum cum Creta	29%	—	"Drug Company."
Q	23	Magnesi Sulphas ..	21%	—	Iditto.
		Ferri Sulphas ..	40%	—	Iditto.
T	44	Liquor Plumbi Subacetatis	57%	—	Co-operative stores.

The case of serious error (No. 15) was one in which a pill containing 1 grain of mercury and chalk, together with a grain of extract of hyoseyamus, was prescribed. We found from the analysis of some of the pills (12 in number) that this quantity was exceeded by 29 per cent., but on the analysis of others, made up from the same prescription, we found considerably less of this ingredient, and we were led to the conclusion that the excess revealed by the first analysis might be due to an imperfect mixing of the mass (composed of 12 grains of the mercurial powder and 12 grains of the extract of hyoseyamus) from which the pills were probably made by its division into twelve parts. In order to test this point, we sent a similar prescription to the same place. We have reason to think, however, that on the second occasion the dispenser must have had some knowledge of our inquiry, as the amount of mercury and chalk contained in each pill was exactly correct.

Besides a want of accuracy and occasional gross carelessness in the dispensing of medicines, our inquiry has revealed other indications of neglect. In two instances poisons (sulphate of atropine and perchloride of mercury) have been sold in white bottles, and in the case of the atropine solution there was no mark whatever to indicate that the liquid (looking like water) contained in the little ordinary glass phial was "poison."

In conclusion, we think that some amendment of the Food and Drugs Act may probably be found necessary, in order to protect the public against gross carelessness in the dispensing of medicines, and also to secure greater accuracy in dispensing.

Appendix showing the character of the Prescriptions; the nature of the Drug estimated; the number of the Medicines, classified according to whether they were within the ten per cent. limit or beyond the ten per cent. limit; the amount of error (over or under the quantity prescribed) in those which were beyond the ten per cent. limit.

The directions for the preparation and use of the medicines which formed part of each prescription are omitted.

Letter denoting the Prescription	Prescription	Drug estimated	Number of sample accurately dispensed, or within ten per cent. limit	Number of sample beyond ten per cent. limit	Amount of error	
					Over	Under
A	Potassii iodidi, gr. xxx.	Potassii iodidum	1			
	.. ..	.. ..	2			
	Aquæ destillatæ, 3 vj.	.. ..	3			
			31 33	29	12%	
B	Hydrargyri perchloridi, gr. xij.	Hydrargyri perchloridum	.. ..	4	..	11½%
	Aquæ destillatæ, 3 viij.	.. ..	6			
C	Hydrargyri perchloridi, gr. xij.	Hydrargyri Perchloridum	.. ..	5	32%	
	Spiritus rectificati, 3 j.	.. ..	.. ..	30	11½%	
	Aquæ destillatæ, 3 vij.	.. ..	.. ..	32	..	14½%
			34 41 42			
D	Ferri et ammonii citras	Ferri et ammonii citras	.. ..	7	..	13%
	Aquæ destillatæ, 3 vj.	.. ..	8 9			
			.. ..	35 37 39	..	51% 29% 10%
E	Ferri sulphatis, gr. xl.	Ferri sulphas	.. ..	10	..	85%
	Aquæ destillatæ, 3 viij.	.. ..	.. ..	

Letter denoting the Pre- scription	Pre.scription	Drug estimated	Number of sample accu- rately dispensed, or within ten per cent. limit	Number of sample beyond ten per cent. limit	Amount of error	
					Over	Under
F	Quiniae sulphatis, gr. xij.	Quiniae sulphas	.. ..	11		
	Acid. sulph. dil. ℥ xx. . . . .		.. ..	12		
	Aquæ destillatæ, ℥ vj. . . . .		.. ..	13		
				33		
				38		
G		Hydragrynum cum cretâ		40		
	Hyd. cum cret. gr. xij. . . . .		.. ..	14	..	26%
	Ext. hyoscyani. gr. xij. . . . .		.. ..	15	29%	
H		Ferri sulphas				
	Ferri sulph. gr. xl. Acid. sulph. dil. ℥ xv. . . . .		.. ..	16		
	Spt. æth. sulph. ℥ xv. . . . .		.. ..	
	Aquæ destillatæ, ℥ viij. . . . .		.. ..	
K	Potassii iodidi, ℥ ss.	Potassii iodidum	.. ..	17		
	Aquæ destillatæ, ℥ vj. . . . .		.. ..	
L	Potassii iodidi, ℥ j.	Potassii iodidum	.. ..	18		
	Decoct. cinch. flav. ℥ vj. . . . .		.. ..	
M	Potassii iodidi, gr. lx.	Potassii iodidum	.. ..	19		
	D. coct. cinch. flavæ, ℥ viij. . . . .		.. ..	20		
N		Tinctura ferri perchloridi ..		21		
	Tinct. ferri perchlor. ℥ xv. . . . .		.. ..	
	Acid. hydrochlor. dil. ℥ x. . . . .		.. ..	
	Infus. quassiae, ℥ j ss. . . . .		.. ..	
P	Sodæ sulphatis, ℥ iv.	Sodæ sulphas	.. ..	22		
	Acid. sulph. dil. ℥ j. . . . .		.. ..	
	Inf. gentiane co. ℥ vj. . . . .		.. ..	
Q	Magnesiæ sul- phatis, ℥ j.	Magnesiæ sulphas	.. ..	23	21%	
	Ferri sulphatis, gr. v. . . . .		.. ..	
	Acid. sulph. dil. ℥ xv. . . . .		.. ..	23	40%	
	Aquæ Pimentæ, ℥ j ss. . . . .		.. ..	
R	Potassii bromidi, gr. xl.	Potassii bromi- dum	.. ..	24		
	Aquæ, ℥ vj. . . . .		.. ..	25		
S	Ammonii carb. gr. xxx.	Ammonii car- bonas	.. ..	26		
	Spiritus ætheris, ℥ iij. . . . .		.. ..	
	Infusi caryophylli ad. ℥ viij. . . . .		.. ..	
T	Glycerini, ℥ j.	Liquor plumbi subacetatis	.. ..	27		
	Liquoris plumbi subacet., ℥ j. . . . .		.. ..	43		
	Spiritus rectifi- cati, ℥ iv. . . . .		.. ..	44	57½%	
	Aquæ rosæ ad. ℥ viij. . . . .		.. ..	
V	Atropinæ sul- phatis, gr. ij.	Atropinæ sulphas	.. ..	45		
	Aquæ destillatæ, ℥ j. . . . .		.. ..	46	..	12%
			.. ..	47		
			.. ..	48		
			.. ..	50	49	14%

THE NEW ELEMENT GERMANIUM.

THE *Chemiker Zeitung* gives further particulars concerning the mineral *argyrodite*, which has been discovered in the Himmelsfuerst mine, Saxony. It has been examined chemically by Dr. Cl. Winkler, whose analysis shows 73 to 75 per cent. of silver, 17 to 18 of sulphur, 0.21 of mercury, small quantities of iron, and traces of arsenic. Repeated analysis showed a constant loss of 6 to 7 per cent., for which the ordinary process of examination failed to account. As the result of careful research Winkler found that the mineral contains a new element, *germanium*, similar to, but distinct from, antimony. When the mineral is heated in a current of hydrogen, a black crystalline residue is obtained, which consists chiefly of sulphide of germanium, which is a sulpho-acid; fused it is reddish brown, but is snow-white when pure, and is soluble in ammonia. Heated in the air, or in nitric acid, the sulphide is converted into a white oxide, non-volatile when heated to redness, soluble in potash solution, and precipitated as a white sulphide from acid solution by hydric sulphide.

From the oxide or sulphide the element is isolated by reduction in a current of hydrogen; so obtained it is grey in colour, like arsenic, but volatilises with great difficulty at a bright red heat, and the sublimate condenses in small crystals resembling thin iodine; the crystals are quite insoluble, and otherwise are distinct from antimony. Heated in an atmosphere of chlorine, germanium or its chloride forms a white chloride, which is readily sublimed, and is much more volatile than antimony chloride. This is precipitated white by hydric sulphide from acidulous aqueous solution.

The atomic weight of germanium will reveal whether it fills or not the blank existing between antimony and bismuth in the periodic system.

NEW COMPANIES.

JACOB SCHWEPPE & CO. (LIMITED).—The old-established firm of Jacob Schweppe & Co., manufacturers of mineral waters, have registered themselves as a limited liability company, and their business will in future be carried on under the style of "J. Schweppe & Co. (Limited)." They are not offering the shares to the public, as the whole of the interests in the business will be retained by the present partners and their families. No other alteration will be made in the conduct of the business than that involved by the use of the word "limited." The capital is stated at 350,000*l.*, divided into 35,000 shares of 10*l.* each. The first subscribers are:—Henry Evill, Ladbroke House, Ladbroke Road, Middlesex; Stanley Kemp-Welch, 55 Cornwall Gardens, South Kensington; C. D. Kemp-Welch, Broadlands, Sunninghill, Berks; W. Kemp-Welch, Carter Lane, E.C.; H. Kemp-Welch, Sussex Hotel, 52 Leadenhall Street, E.C.; J. Kemp-Welch, Sopley, Hants; J. Kemp-Welch, jun., 21 Cotham New Road, Bristol; Charles H. Evill, 28 Craven Road, Hyde Park.

THE new company of Barrett's Brewery and Bottling Company (Limited), with a capital of 300,000*l.*, in 60,000 shares of 5*l.* each, has been formed for the purpose of further developing the well-known business in London of Barrett & Co. (Limited), brewers, beer-bottlers, wine and spirit merchants, and aerated-water manufacturers, of Bond Street, Vauxhall, and also proprietors, for London, of Barrett's patent screw-stoppers. The purchase-money for the whole of the property, including freeholds, patent-rights, stock-in-trade, trade debts, &c., is fixed at 225,000*l.*, payable 141,670*l.* in cash, and 83,330*l.* in fully paid-up shares, being the maximum amount in shares allowed to be taken by the vendors under the rules of the London Stock Exchange. The accounts of Barrett & Co. (Limited), for the year 1885, for the London business, show a net profit of over 13,000*l.*, notwithstanding the abnormal expenditure out of revenue of 6,200*l.* for extra labour, additional rental and carriage, necessitated by the demolition of the former factory, and the erection of the new buildings, and for interest on loans and debentures.

THE CHEMISTS' ASSISTANTS' ASSOCIATION
ANNUAL DINNER.

A LARGE company, numbering about 150, dined together in the Venetian Saloon of the Holborn Restaurant on Wednesday evening last, March 3, in accordance with the annual custom of the Chemists' Assistants' Association. Mr. Charles Umney, F.I.C., occupied the chair, and was supported by the President and Vice-President of the Pharmaceutical Society and other guests. After dinner Mr. Umney proposed "The Queen," and afterwards "The Medical Profession." The latter toast was replied to by Dr. Stone, of St. Thomas's Hospital, in a humorous and effective speech. All medicine, he said, quoting from Hippocrates, was to be eaten, drunk, or rubbed in. They had eaten and drunk, and now had come the rubbing in. The medical profession owed much to pharmacists; he wished they could owe more to them by having from them such a Pharmacopoeia as the Yankces had got. They had added 120 drugs, but they had only got a piece of patchwork. What they wanted was such men as Mr. Umney to assist in the preparation. The speaker then caused much amusement by giving some coloured sketches of his experiences, to illustrate his views of the extent to which pharmacists should interfere with the prescriptions of medical men. The late Mr. Waugh once told him that the greater part of his afternoons was occupied in calling on eminent medical men to ask them if they really meant what they had written. An old lady took one of his prescriptions, in which a small dose of strychnine was ordered, to a pharmacist, who looked at it, adjusted his spectacles, and remarked, "Marm, do you know there is a most deadly poison ordered here?" The old lady took the prescription home, locked it in a tea-caddy, which she put away in a cupboard, which she locked, locked up the room, and threw away the key.

Mr. T. S. Dymond, in a thoughtful speech, proposed "The Pharmaceutical Society," to which Mr. Carteighe responded. Mr. Umney then proposed "The Chemists' Assistants' Association." He wondered how it was there was no such association in his student days. He had watched the association for a long while, and had read many valuable papers which they had produced. An allusion to the recent investigation by the Chelsea Officer of Health into dispensing was received with loud groans. Mr. Umney concluded by urging all his hearers to make up their minds to work at something, and to do thoroughly whatever they undertook. Mr. Winfrey, president, replied in a speech full of humorous illustrations and political allusions, which gave opportunity for inarticulate expressions of party feeling. "The Visitors" were toasted by Mr. Millhouse, and had the advantage of having Mr. Atkins as their spokesman. Mr. J. F. Burnett wound up the programme with a toast in honour of the Chairman, which was most heartily received. The singing between the speeches was exceptionally good.

URETHAN.

IN our December issue we gave particulars regarding the chemistry of this substance, which is the ethylether of carbonic acid ($\text{NH}_2\text{CO}_2\text{C}_2\text{H}_5$). Since that time it has come into notice in this country, and physicians have it on trial. Regarding its physiological action, we quote from the *Druggists' Circular* a letter by Merck, of Darmstadt, who says: Schmiedeberg first experimented by using urethan on animals; later Jolly applied it to human beings, thereby proving it to be a hypnotic. Von Jacksch, assistant of the First Medical Clinic in Vienna, in the last few months subjected urethan to a close examination, which resulted in justifying its classification among the best known hypnotics. Von Jacksch further calls attention to the fact that all other hypnotics produce more or less of other indications, causing false impressions, which properties urethan does not possess. Von Jacksch has employed this remedy in various forms of insomnia, in the dose from 0.5 to 1 gramme, even in the higher forms of phthisis, in derangement of the valvular system, and in fatty degeneration of the heart, with the most

serious symptoms; in all cases it produced quiet and lasting sleep without causing any annoying reactions. Concerning its physiological action it should be classified among those remedies acting on the brain. The irritability of the sensitive respiratory organ not being altered to any appreciable extent, it is concluded that this preparation must act without greatly influencing heavy coughing, asthmatic attacks, neuralgic pains, and the lance-like sensations of undeveloped consumption. Von Jacksch is convinced that urethan will prove a specific in the treatment of diseases of children, as the sleep produced by it very much resembles natural sleep. Urethan is administered with or without corrective, in form of powder or in solution. Here it must be mentioned that urethan in small doses is not an infallible sleep-producing remedy, but its hypnotic effect, after administering it to the extent of one gramme, leaves nothing to be desired."

Dr. Myrtle, of Harrogate, writing to the *British Medical Journal* of February 20, states that he has had satisfactory results with urethan. In 50 cases he has had no disappointments, and his experience is that 15-grain doses produce calm and refreshing sleep, where opium and chloral either fail or cannot be tolerated.

In the *Medical Press and Circular* of the 3rd inst. Mr. George Foy, F.R.C.S., has a note on the new hypnotic, which contains nothing that has not been published by us; and we only refer to the paper in order to correct a statement made by Mr. Foy to the effect that "Merck, of Dresden, is the principal, if not the sole, maker of urethan." We may state that the hypnotic is now made, and the demand may be supplied, by British manufacturers.

LANOLIN.

SINCE the publication in our January issue of a brief note on this new ointment basis, it has attracted considerable attention, and promises to take a permanent place in therapeutics. Lanolin is an orange-brown fatty substance, somewhat stiff and tenacious, but readily softening when placed on the skin; the odour is by no means agreeable, and, in fact, the general appearance of the fat is not favourable to it. But the advantages which the basis offers are such as to overshadow the disadvantages. So far, experience of the use of the remedy is limited but gratifying. In a second paper contributed to the *British Medical Journal* (February 13, 1886) Dr. O. Liebreich gives a number of formulæ for ointments, principally for skin diseases. Of these we give the following examples:—

Hebra's Ointment, with Lanolin.

	Parts.
Emp. plumbi	50
Ol. olive	20
Lanolin	30

Zinc Ointment, with Lanolin.

	Parts
Zinci oxidii	10
Adipis	10
Lanolin	80

Chrysarobin Ointment.

	Parts
Chrysarobin	10 to 20
Adipis	10
Lanolin.. .. .	80

It will be seen than lanolin requires the addition of another fat in order to bring the ointment to the usual consistency; this added fat may be lard or olive oil. It should also be noted that toxic remedies should be prescribed in much less quantity, because of the superior absorbent nature of lanolin; alkaloids, such as aconitine and veratrine, should be ordered in about half B. P. quantity, otherwise poisonous symptoms may result.

It is understood that common wool-fat and wool-oil (Suint?) are offered as lanolin. These may be distinguished from lanolin by the following tests:—

1. Half a drachm or more of lanolin heated in a test-tube with two drachms of 30 p.c. soda solution should not give off ammonia.

2. Two drachms of lanolin heated in twice its bulk of water over a water-bath should be changed into a perfectly clear oil. Impure lanolin does not lose its opacity.

3. The water in which the lanolin is melted should not, when freed from the fat, give any residue on evaporation, showing absence of glycerine.

4. When kneaded with its own weight of water lanolin forms a perfect mixture, similar in consistency and stickiness to lanolin itself. Impure lanolin so treated does not adhere to the spatula.

FRENCH CORRESPONDENCE.

(From our Special Correspondent.)

THE "REPERTOIRE" AND THE "ARCHIVES."—M. Crinon, Director of the *Archives de Pharmacie*, noticing our reference to the suit between the *Repertoire de Pharmacie* and his journal, asks us to add that the application of the former for an injunction has been refused.

ILLNESS OF CHEVREUL.—For several days contradictory accounts have been circulating regarding the centenarian's health. He caught a severe cold, it appears; then he was reported better; and now he is said to be worse, but what is the truth is hard to tell. Certain it is that there is quite a pilgrimage to the Rue Cuvier, of people going to leave their names on the book kept for the purpose—usually a bad sign.

THE PARIS SOCIETY OF PHARMACY.—At the regular monthly meeting, held March 3, an interesting poisoning case was related by a pharmacist interne of the Larivolière Hospital. A woman had taken about half a litre of petroleum, with suicidal intentions, and was received for treatment. On the first day her urine contained 21 cubic centimetres of petroleum; 5 cubic centimetres on the second day, and a few drops on the third. On the sixth day she was almost well.

The Society elected a new member, M. Viron, pharmacist of the Salpêtrière Hospital. There were seven or eight candidates, but the number of members is limited, and only one can be elected at the same sitting.

PASTEUR AND HYDROPHOBIA.—At the session of the Academy of Sciences on March 1, M. Pasteur communicated a report of his progress in the treatment of hydrophobia down to that date. On February 25, four months after he announced his discovery, he had treated his 350th patient. He had been astounded to learn the number of persons who were bitten by supposed mad dogs. Taking the first 100 persons treated between November 1 and December 15, he declares that all are now out of danger with the one exception of the girl who died. She had been bitten thirty-seven days when treatment was commenced, and M. Pasteur claims her case as a conclusive proof of the effect of inoculation. Experiments on rabbits showed that although she was not saved the effect of the virus was much diminished. M. Pasteur's report was received with great enthusiasm, and the Academy immediately decided to form a commission charged with the duty of founding an institution in Paris for the treatment of hydrophobia. It was suggested that an international subscription to defray the expenses of this foundation should be proposed. M. de Freycinet, President of the Ministerial Council, who was present, was named on the commission.

ACCORDING to the *Popular Science News*, to obviate hereditary tendency to disease in the young, "Wash them, air them, and iron them."

THE TALK OF THE DAY.—Mrs. A. "I hear that the Montmackingtons are going to spend the winter in Paris." Mrs. B. "Indeed? you surprise me! When were they bitten?"—*Boston Transcript*.

THE BATTLE OF THE BY-LAWS.

THERE was a sound of murmuring in the Square,
And Bloomsbury's school was falling to decay.
Her beauty and her chivalry remained; but where,
Where were her students, where alas! were they?
Crammers, 'twas said, had tempted them away,
Blinding with dust examinerial eyes;
Fear seized on pharmacy, fear and dismay,
But not despair; for see, the Chiefs arise,
And in their misty caves a remedy devise.

What should it be? How should they win again
That fame which once was theirs, that sweet applause
Which greeted erst their speech, and urged their pen?
"Go to, go to," quoth one; "behold the cause
Of our calamities in these defective laws,
Which cramp our actions and restrict our pride.
Forth to the Senate! give to your words no pause
Till Queen, and Lords, and Commons we've defied,
And on the wave of victory triumphantly we ride."

Within a little room in street of Bond,
Sate Bloomsbury's favourite Chieftain; when he heard
The sound of battle in the air, he with fond
Delight caught at the tone, e'en as Hibernians gird
Up their loins and flourish their shillelaghs when the word
Of "Donnybrook" and its famed fair floats to their ears.
He led the van, aroused his comrades and their spirits stirred,
Purged from his camp the doubters, mocked at fears,
And started forth to battle with the British House of Peers.

But why was all this vacillating to and fro?
Why did the eager warriors in committee wait?
Why not rush on the unsuspecting foe
While hearts were high and courage all elate?
Surely no "craven fear of being great"
Had checked the leader or had struck his followers dumb!
Oh no, not that, as Carlyle says, "Quite otherwise than that,"
It was that all, by legal mind advised, had come
To see an easier way to win the planned curriculum.

"Tinker your by-laws"—thus advised Sir Flux—
'And so be independent. Law is for slaves
Such as your members and the general public. Pluck's
All that you need. To work by by-laws so much trouble saves,
You rule as easily as Britannia rules the waves." [teighe,
"Ah sure and that's a happy thought," responded Mr. Car-
"And shall we not rule Scotland so, at least till she behaves
More humbly, and consents to yield obedience hearty
To us, who must be recognised as the superior party?"

Then wild and high the Camerons' gathering rose,
The clans were startled, and to Bloomsbury Square
Came the bold Northrons with their tale of woes,
And many a friendly word of sympathy found there.
But firmly onward Cateighe pressed, nor dare
His colleagues check his too-impetuous speed
Were the fate facing them or foul or fair,
Shouting "Curriculum, and may Scotland bleed!"
Bear opposition down, and cry "Agreed."

But now my Lords appear upon the scene
And say, "Oh no, these by-laws may not pass.
You have taken too much on you, friends, we ween;
And much as we regret it, yet, alas!
We must extinguish you." Their glory fades like grass,
And those poor by-laws which it took so long to build
Fell like a house of cards in confused mass,
And while their burning hopes lie crushed and killed
They find no shadowy benefit the bitter pill to gild.

Last year they talked as if the thing was done;
They planned the courses, and arranged the fees;
Their orators did through the country run
With pictures of our future pharmacies,
Where all of us should live in dignity and ease.
But now, refused by Whitehall, snubbed by Parliament,
Driven by them, not wandering where they please,
They lie beside their crushed experiment,
Council and by-laws, all in one dread burial blent.

TRADE-MARKS APPLIED FOR.

THE Trade Marks Journal publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, within two months of the date of this journal, give notice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1833, of opposition to such registration." All communications relating to patents, designs, or trade marks to be addressed to H. Reader Lack, Esq., Comptroller-General of Patents, Designs, and Trade-marks, Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

From the "Trade Marks Journal," February 17, 1886.

COAT OF ARMS SURMOUNTED BY CROWN.—Initials, pierced by crossed arrows, to right and left; for brushes. Sans & Co., St. Omer, France, 46,817.

LARGE OBLONG LABEL, bearing different designs and printed matter in English and German; for a lactated food. Wells & Richardson Co., 58 Shoe Lane, E.C. 47,475.

"CARTER'S IRON PILLS." Oblong ornamental label, bearing above words and other printed matter. 43,914. **"CARTER'S LITTLE LIVER PILLS."** Plain label, bearing above words. 48,915. **"CARTER'S LITTLE LIVER PILLS."** Oblong ornamental label, with representation of raven holding scroll in its beak. 43,916. Carter Medicine Co. (Incorp.), New York.

"DR. LISTON'S COMBINED ESSENCE OF ANISEED AND LINSEED." Plain label bearing the above words and other printed matter; for a patent medicine. J. E. Pinch, 5 Cheap Street, Bath. 49,043.

"LOWE'S AMERICAN TOOTHACHE SPECIFIC." Oblong label bearing printed matter and facsimile of signature; for a patent medicine. Chas. Lowe, Claremont Road, Surbiton, S.W. 49,251.

"THE AMMURIAGEN," For surgical instruments. Allen, Hanburys & Co., Plough Court, E.C. 49,264.

"JOHN BULL BRAND." For substances used as food or ingredients of food. Paine & Co., St. Neots, Huntingdonshire. 49,411.

"VULCAN." For chloride of lime. Peter R. McQuie & Son, 19 South John Street, Liverpool. 49,511.

"PRESTON NEW DOCKS DRY SOAP." Oblong fancy label, with representation of landscape; for soap. J. L. Cromptey, 119 Church Street, Preston. 49,523.

"GEDDE'S FLUID EXTRACT OF HEMLOCK BARK." Fancy label, with representation of landscape and printed matter; for a medicine. Gedde Manufacturing Company, Boston, U.S.A. 49,590.

"THE TOWN DRY SOAP." Oblong label bearing above words, and Coat of Arms in right top corner; for soap. E. P. Fitchett, 137 Pershore Street, Birmingham. 49,594.

COAT OF ARMS, bearing bull's head and three clover leaves, with figures of Ceres and Mercurius as supporters; for substances used as food or ingredients in food. Hagemann & Co. (Lim.), Rotterdam. 49,556.

From the "Trade Marks Journal," February 24, 1886.

CIRCULAR LABEL, bearing the word "Glencairn" and other printed matter; for comestibles, baking-powder, spice, lemon-juice, &c. The Cunningham and de Fourier Company (Limited), 2 Duncan Street, Leman Street, E. 43,923.

"CARRICK'S SODIUM HYPOCHLORITE," for a disinfectant. J. N. Beach, 24-25 Hart Street, Bloomsbury, W.C. 46,535.

"COPE'S SPRUCE BANYON BEER." Circular label, with dark background, bearing above words and other printed matter; for a non-alcoholic beverage. Tom Hill, trading as "Thomas Cope," 6 Furnival Road, Sheffield. 46,911.

ORNAMENTAL LABEL, with representation of Cupid with medicine-bottle hovering over globe; for a medicine. Hoptonic Company, Grand Rapids, Michigan, U.S.A. 47,511.

"TOOTHACHE DISCS." Square label, with circle in centre, on dark background, bearing the above words and other matter; for medicated toothache discs. Medcalf & Co., 21 Castle Street, City Road, E.C. 48,576.

"HERR GROSSE'S DUNATOS." Words, with representation of equestrian statue of William III.; for a medicine. E. F. Grossé, Bank House, Cheltenham, Gloucestershire. 43,903.

"COMBINED." Word and other matter on oblong label, with representation of ledger and copying-press; for ink. H. C. Stephens, 191 Aldersgate Street, E.C. 43,163.

OBLONG FANCY LABEL, with representation of Chinese children drawing wagonette, armorial bearings on right-hand side; for mineral dyes and colours (49,205); the same, for non-mineral dyes and colours (49,207). Badische Anilin und Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany.

"THISTLE PURE." Words, surmounted by triangle, crossed by circle; for Rosed oil for use in manufactures. Pearson, Beckitt & Co., Port Dundas, Glasgow. 49,215.

"TWO HANDS JOINED," for mineral and aerated waters. John Collins, 15 Leazes Lane, Newcastle-on-Tyne. 49,746.

"KEY OF HEALTH PILLS." Circular label, bearing the above and other words; for pills. Key & Co., 156 Fore Street, Exeter. 49,833.

"RYLANDS' BOTTLE" (49,376), and **FIVE OTHER BOTTLE MARKS** (49,253, 49,364, 49,910, 49,911, 49,912); for glass bottles. Daniel Rylands, Barnsley, Yorkshire.

THOMAS ORR'S HEALTH RESTORER. Oval label, with portrait; for medicines. Thomas Orr, Dairy, Ayrshire. 49,894.

"ZYMINISE," for chemical substances prepared for use in medicine and armacy. Burroughs, Wellcome & Co., Holborn Viaduct, E.C. 49,926.



NOTICE OF PUBLIC EXAMINATIONS.

FITZMAURICE, JOHN LOUIS, Union Square, Bury, surgeon. February 27, 10.30. At 16 Wood Street, Bolton. Court—Bolton.

MAW, GEORGE, Thornton-le-Dale, veterinary surgeon. March 1, 3. At Official Receiver's Offices, 74 Newborough Street, Scarborough. Court—Scarborough.

QUEENBOROUGH, J., Boston, chemist. March 4, 12.30. At Official Receiver's Office, Boston.

ROWLANDS, THOMAS CHRISTOPHER, 32 and 34 Mildmay Park, Canonbury, dentist. March 3, 11. At Bankruptcy Buildings, Portugal Street. High Court of Justice.

RECEIVING ORDERS.

CONCANNON, AUSTIN, 9 Wellington Road, North Stockport, physician and surgeon. February 11. Examination, March 17, 11.30. Court—Stockport.

DAY, WALTER HENRY HORATIO, Grove Vale, East Dulwich, and Peckham. Rye, physician and surgeon. March 31, at 34 Lincoln's Inn Fields.

FITZMAURICE, JOHN LOUIS, Union Square, Bury, surgeon. February 13. Examination, March 8, 11. Court—Bolton.

GRANT, JAMES, Longton, medical practitioner. March 10, at Stoke-npon-Trent and Longton.

SNEATH, THOMAS DIXON, 23 Stodman Street, Newark, chemist and druggist. February 21. Examination, March 16. Court—Nottingham.

FRANGLEY, OSBORNE, Salisbury, trading as "C. T. & O. Prangley," corn dealer and agricultural chemist. April 9, at Salisbury.

TUDOR, WALTER, 39 Fernoy Road, Paddington, trading as "Tudor & Co.," perfumer. Feb. 24. Examination, April 6, 11, at 34 Lincoln's Inn Fields. High Court of Justice.

APPLICATION FOR DISCHARGE.

BIRKBY, JOSEPH ERNEST ALBERT, Liversedge, trading as "Joseph Birkby & Son," drysalter. Hearing March 23. Court—Dewsbury.

RICHARDS, WILLIAM ARMSTRONG, Wheelock, manager of alkali works. Hearing March 13. Court—Macclesfield.

ORDERS OF DISCHARGE.

RATH, ADOLPH ISIDOR, 10 Market Place, 1 Hopwood Avenue, and 35 Lloyd Street, Manchester, manufacturer of india-rubber and waterproof goods. Suspended for four months.

SMITH, GEORGE, 72 Mark Lane, and Anchor Works, Bow Bridge, starch and vinegar maker. Suspended for six months, to July 19.

NOTICE OF MEETINGS.

(Under Bankruptcy Act, 1883.)

CONCANNON, AUSTIN, 9 Wellington Road North, Stockport, physician and surgeon. February 24, 12, at Official Receiver's Offices, County Chambers, Market Place, Stockport. Court—Stockport.

GRANT, JAMES, Longton, medical practitioner. March 11, at Official Receiver's Offices, Newcastle-under-Lyme.

HARPER, EDWARD JOHN, Delamere Street, Over, veterinary surgeon. February 16, 10.15, at 152 Hospital Street, Nantwich. Court—Nantwich, &c.

HARRISON, JAMES, 11 and 12 Silksworth Row, and 32½ Trimdon Street, Sunderland, chemist and druggist. February 17, 2.30, at the Law Society's Rooms, 32 St. John Street, Sunderland. Court—Sunderland.

HUNT, ARTHUR, 1 Stoke Villas, Old Tiverton Road, and 94 and 95 Fore Street, Exeter, chemist and druggist. February 23, 11, at Bankruptcy Buildings, Portugal Street. Court—Exeter.

McDONALD, GRANT, 3 Broadway, Ludgate Hill, and 38 Penrose Street, Walworth, boot-maker and medicine vendor. March 5, 11, at Bankruptcy Buildings, Portugal Street. High Court of Justice.

FRANKLEY, OSBORNE, Salisbury, trading as "C. T. & O. Prangley," corn dealer and agricultural chemist. March 12, at Official Receiver's Offices, Salisbury.

WILKINS, C. M., 446 Strand, and 1 Devonshire Street, Portland Place, doctor of medicine and commission agent. February 25, 11, at 33 Carey Street. High Court of Justice.

(Ireland.)

BROWNIEG, W. G., trading as "Kelly & Co.," chemist, &c. Meeting for last examination, February [23, 11. Official Assignee—P. Macneely. Court—Dublin.

NOTICE OF PUBLIC EXAMINATIONS.

SNEATH, THOMAS DIXON, 26 Stodman Street, Newark, chemist and druggist. March 5, 12, at Official Receiver's Offices, 1 High Pavement Nottingham. Court—Nottingham.

ADJUDICATIONS.

CONCANNON, AUSTIN, Stockport, physician and surgeon.

HARPER, EDWARD JOHN, Delamere Street, Over, veterinary surgeon. Trustee—T. Bullock, Official Receiver, Newcastle-under-Lyme. February 5. Court—Nantwich and Crewe.

HARRISON, JAMES, 11 and 12 Silksworth Row, and 32½ Trimdon Street, Sunderland, chemist and druggist. February 18. Court—Sunderland.

HODGSON, THOMAS, 10 St. James Street West, Newcastle, tea dealer and drysalter. February 10. Court—Newcastle.

McDONALD, GRANT, 3 Broadway, Ludgate Hill, and 38 Penrose Street, Walworth, boot maker and medicine vendor. February 20. High Court of Justice.

WILKINS, C. M., Strand, and Devonshire Street, Portland Place, London, doctor of medicine and commission agent.

NOTICES OF DIVIDENDS AND INTENDED DIVIDENDS.

BENSON, GEORGE WILLIAM, 157A and 157B Great Portland Street, chemist. Proofs by March 2, to Trustee—R. P. Harding, Chief Official Receiver, 33 Carey Street.

BENSON, GEORGE WILLIAM, 157A and 157B Great Portland Street, chemist. Composition of 5s. within fourteen days. Receiving order rescinded. High Court of Justice.

CARPENTER, WILLIAM JOHN, jun., 147 Queen Victoria Street, Union Road, and 168 Rotherhithe New Road, Rotherhithe, trading as "Carpenter & Co.," oil and colour merchant and manufacturer. First and final dividend 2s. 3d., on any day except Saturday, at office of Trustee—W. Izard, 51 Gracechurch Street.

EILMAN, THOMAS, jun., Aston and Costa Green, Birmingham, druggist and drysalter. Proofs by Feb. 19, to Trustee—W. E. Fowkes, 8 Cannon Street, Birmingham.

HOUNSELL, DAVID ROBERT, Longfleet, Poole, aerated-water manufacturer, &c. First and final dividend 6s. 3d., on February 25, at Official Receiver's Office, City Chambers, Salisbury.

JUMEAUX, BENJAMIN, Springfield, Ambleside, surgeon and artist. Dividend 3s. 3d., on February 19, at Official Receiver's Offices, 25 Victoria Street, Liverpool.

LAWRENCE, CHARLES, 1 Lincoln Street, Mile End, 50 and 52 Gun Lane, Limehouse, 103 and 105 Brook Street, Ratcliff, and 20 High Street, Bow, veterinary surgeon. First dividend 4s. 6d., any day except Saturday, at Chief Official Receiver's Office, 33 Carey Street.

MACGILL, ANDREW, St. Leonard's Road and 172 Abbott's Road, Bromley-by-Bow, doctor of medicine. First and final dividend 3s. 4d., any day except Saturday, at Chief Official Receiver's Office, 23 Carey Street.

SMITH, JOSEPH, St. Alban's House, Weymouth, chemist and druggist. First and final dividend 6s. 2½d., on January 20, at Official Receiver's Offices, City Chambers, Salisbury.

WOMERSLEY, JAMES NAPIER, Shrewsbury, trading as "James Womersley & Co.," aerated-water manufacturer. Proofs by March 5 to Trustee—A. O. Miles, 28 King Street.

(Scotland.)

MACDUGALL & GUNN, soap makers, &c. Dividend on March 5 at office of J. Affleck, C. A., Glasgow.

McCALLUM, J. as "McCALLUM & Co.," chemical manufacturers. Dividend on March 8, at office of R. Clement, Grief.

SPENCE, T., & W. J. REID, West End Mineral Water Company. At Brown, Jun., Dairies & Tait's Chambers, Glasgow. February 22 for dividend.

PETITIONS FOR WINDING UP.

MILFORD FULLER'S EARTH WORKS (Limited). Claims by March 1, to Liquidator—J. H. S. Hamming, accountant, 54 Gresham Street.

PARTNERSHIPS DISSOLVED.

BELL, H. O., & Co., Side, Newcastle, metal, chemical, paper, and insurance brokers. (Henry Bell & Henry Oswald Bell.) January 1. Debts by H. O. Bell.

BROWN & AYRE, Jarrow, mineral-water manufacturers. (Edward Benjamin Brown and George Samuel Ayre.) February 5.

FULLWOOD, R. J., & BLAND, Beverden Street, Hoxton, manufacturers of annatto, remnet, and oleo-linoleum coloring. (Alfred Henry Fullwood and Charles Bland.) January 1. Debts by Bland.

HAY & TUCKETT, Prince's Buildings, Bath, and Bath Road, Swindon, surgeon dentists. (John Hay and Henry Herbert Tuckett.) February 8.

JENSEN, J., & Co., cod-liver oil factory, Buttesmiers, Loffotin Islands, Norway, and 10 St. Helen's Place, London. (Robert William Hudson, Alfred Benjamin Browne, and George Samuel Ayre.) August 6, 1884.

SUTTON & STANUAR, Worsley Street, and Pulantine Gum Works, Broughton Road, Salford, gum and starch manufacturers. (William Hale Sutton and John Stanuar.) November 23.

TANNER & KIDSON, Carlton Cottage, Fisherton Anger, aerated-water manufacturers and commission agents. (Robert Douglas Tanner and Walter Kidson.) September 30.

WALKER, D., & MARY, McF., under the style of "Vauxhall Methylating Company," Liverpool.

WHITAKER, DUGGAN, & Co., Colidon Street Oil and Grease Works, Manchester, oil merchants and refiners. February 23. (James Whitaker and Benedict Joseph Duggan.) Debts by Duggan.

ORDERS FOR ADMINISTRATION IN BANKRUPTCY OF ESTATE OF DECEASED DEBTOR.

JOHNSTONE, JOHN FORSYTH, 260 Bardett Road, 3 Bow Common Lane, and Felvidere, chemical and manure manufacturer. February 16. Examination, March 26, 11.30, at 34 Lincoln's Inn Fields. High Court of Justice.

McDONALD, GRANT, 3 Broadway, Ludgate Hill, and at 38 Penrose Street, Walworth, boot maker and medicine vendor. February 16. Examination, March 25, 11.30, at 34 Lincoln's Inn Fields. High Court of Justice.

MAW, GEORGE, Thornton-le Dale, veterinary surgeon. February 16. Examination, March 16, 3. Court—Scarborough.

TRUSTEE TO DEBTOR'S ESTATE.

JAMES, G. W., mineral-water manufacturer. By A. E. James, committee of his person and estate. Trustee—F. G. Clark, Ship Street, Brighton.

PETITIONS UNDER CESSIO ACTS.

BURN, JAMES, Aberdeen, doctor of medicine. At the Sheriff Court House, Aberdeen. February 19, 12.30.

MACDONALD, WILLIAM, Lea hills, parish Crawford, surgeon. Claims by February 24, to Trustee—J. Amcan, writer, Lanark. At the Sheriff Court House, Lanark. March 18, 11.30.

TRUSTEE TO SCOTCH SEQUESTRATION.

PARIE, GILBERT, chemist and druggist. Trustee—R. Blyth, accountant, Glasgow.



AND

Literary Notes.

The Pocket Pharmacopœia for 1885, including the therapeutical actions of the drugs, with the natural orders and active principles of those of vegetable origin. By Armand Semple, B.A., M.B. Cantab., &c. London, 1886: Baillière, Tindall & Cox. Small 8vo., 192 pages. Price 3s. 6d.

THE author of this book tries, pharmaceutically, to play "Hamlet" with the part of Hamlet left out—he gives us a Pharmacopœia without the pharmacy. The explanation of the circumstance is that the work is intended as a medical students' cram-book. Of course, the book is almost useless to pharmacists, and is especially so to pharmaceutical students. The information which it gives regarding active principles and therapeutics is common-place, but may be convenient as memoranda for those who have studied more pretentious works.

Although the contents of the book are mainly reprinted from the British Pharmacopœia, we cannot say that the author has creditably done his part of this merely mechanical work.

A Guide to Therapeutics. By Robert Farquharson, M.P., M.D., &c. Fourth edition. London: Smith, Elder & Co. 1886. 10 + 394 pages. Price 7s. 6d.

ALTHOUGH this work continues to hold its own amongst the growing number of similar books, the necessity for a fourth edition has mainly been occasioned by the publication of the new Pharmacopœia. As a guide to therapeutics for the use of students it undoubtedly presents some commendable features, such as good arrangement, brevity and clearness of statement, and some chapters are characterised by praiseworthy fulness, but on the whole the author's aim to satisfy the immediate requirements of the student is too apparent. It should not be forgotten that in the majority of cases the text-book of student-days develops into the practitioner's reference book, and this condition of things is recognised and guarded against by many authors, who prefer to discuss each remedy fully rather than to provide for present exigencies. Dr. Farquharson is not a member of this school, he is inclined rather to be opinionative and cynical, characteristics entirely out of place in a student's text-book, and also detrimental to the student in the examination-room. Some of the information given is indefinite, insufficient, and, in some cases, incorrect. For example, quinine has ten pages devoted to it, cinchonine *three lines*, quinidine *two lines*, and cinchonidine *one line*. It is stated that cinchonidine "has some tonic properties"; quinidine "is an efficient substitute for the more expensive salt" (quinine); and cinchonine "can in many cases take the place of quinine as an antiperiodic, at about one-eighth the cost." As a matter of fact quinidine is a slightly more powerful antiperiodic than quinine; cinchonidine is next in that respect to quinine, and was extensively used, and with success, in this country when quinine was costly; and as for cinchonine, it is more correct to say that it has an eighth of the therapeutical rather than the commercial value of quinine. Asafœtida is dismissed rather cavalierly and without due respect of the fact that we are slowly, but surely, learning that many old-fashioned and efficient remedies owe their efficacy to principles of well-defined physiological action. The author says that "the nauseous taste and smell of asafœtida are supposed to give it an advantage over other drugs of the same class;" this may be funny, but it is nothing else. We are surprised to learn that gentian and chiretta have a "pleasant aromatic bitter flavour."

The author does not pretend to give any *materia medica* information, or what he terms "botanical and pharmaceutical detail." We question the wisdom of this exclusion; in the majority of medical examinations *materia medica* and therapeutics are combined, and it is a safe principle, especially when an

author caters for students, to keep in the lines of examinations. The author gives, however, an abundance of pharmaceutical detail, and acknowledges the assistance of Mr. Carteighe, whose eminence as a pharmacist no one will dispute. The pharmaceutical detail consists of model prescriptions, the pharmacy of which is on the whole excellent, but we venture to protest that many of the models are bad examples of prescription-writing. For example, this is decidedly inelegant:—

Liq. op. sed. ʒj.; ant. tart. gr. j. ad gr. ij.; mist. camph. ʒvj. Misce., &c.

This bad form is the more unpardonable from the fact that such expressions as "pot. iod." and "hyd. c. cretâ." occur throughout the text. We note the following amongst the prescriptions, and we give it with Dr. Farquharson's comments: "most of the (phosphorus) pill masses are useless" (the new B.P. mass is not) "from being made with insoluble materials, which pass through the bowels unchanged. But Mr. Carteighe has furnished me with the following formula for soluble pills:—

Phosphori, gr. j.; carbon. bisulph. q. s.; sapon. duri; pulv. glycyrrhizæ; pulv. guaiaci, ana ʒ ss. Fiat pil. xxx.; and varnish to prevent oxidation.

Our readers may recognise this formula as that originally published by Messrs. Allen & Hanbury, well known to the trade, and reprinted in our 1884 Diary.

So far as the new Pharmacopœia is concerned, the book is disappointing. *Stramonii folia* still occurs amongst official drugs, although the author is delighted to notice the omissions that have been made, and would have extended the list. There is painful evidence that the author has been otherwise engaged—in electioneering, perhaps—when preparing the present edition, for we have nothing about the therapeutics of hypophosphites, and sulphocarbolates, and the majority of additions mentioned are treated in a hurried fashion.

Rudiments of Chemistry. By Temple Orme, Teacher of Chemistry at University College School, London. London: Swan Sonnenschein, Le Bas & Lowry. 1886. 127 pages, with woodcuts. Price 2s. 6d.

"THIS book does not profess to be more than the mearest elementary introduction to chemistry," is the opening sentence of the preface, and so far it professes too much. The author confines himself exclusively to "the valuable researches of Black, Cavendish, and Lavoisier," and takes for his subjects flame, combustion, carbon and hydrogen, structure of flame, bases, &c. These he treats upon the methods and principles of nomenclature followed in the earlier part of the century, and this for pupils of tender years! The result is a hundred pages of inconsistency and inaccuracy, which the young pupil will have to unlearn when he advances to more modern work, that is, if he survive the many dangerous experiments which are here imperfectly described. It is desirable that works of this kind should not get into the hands of young persons, and we have sufficient confidence in science-teachers to know that they will reserve this one for their own amusement.

The publishers have done their part of the work well, and the book has as taking an appearance as could be desired.

The Year Book of Pharmacy for 1885 will now have reached all the members of the British Pharmaceutical Conference, who will find in it a good return for their subscriptions. The sixteen-page introduction is a succinct account of the work in pharmaceutical chemistry accomplished during the twelve months covered by the Year Book; the greater part of this work is, of course, foreign, and it is well that British pharmacists should know what continental chemists are about. The abstracts of papers of a chemical nature are generally as brief as possible, and some are marvels in their way; perhaps, however, there is a tendency to cultivate this department too much, and to leave the purely pharmaceutical portion to take care of itself. This is a year book of *pharmacy*, and pharmacy (that is, dispensing, manufacture of galenicals and the like) has a subordinate position in it. There is a possibility of some improvement in this respect.



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SILICATED CARBON PATENT MOVABLE BLOCK FILTERS.

SEE ADVERTISEMENT, PAGE 12.

HAY'S SOLUBLE ESSENCE OF GINGER. See page iii.

HAY'S NEW PREPARATIONS. See page iii

HAY'S COMPOUND FORTIFIED ESSENCE See page iii.

EDITORIAL NOTES.

OUR NEW DEPARTURE.

THIS day we assume our new position among the "newspapers" of the United Kingdom. By the Post-office regulations no publication which is published at longer than weekly intervals can be recognised as a newspaper in this country, although for foreign and colonial circulation newspaper privileges are accorded to monthly journals.

Our first duty at this corner of our career is to acknowledge with much gratitude the generous support which has been accorded to us for many past years. From all classes of pharmacists we have experienced at least fair treatment, and generally much more than that. We have a critical circle of readers, and our faults and errors have seldom escaped detection; but mercy has nearly always tempered strict justice in verdicts affecting us. The wealthy and enterprising wholesale firms connected with the trade have freely supported us by advertisements, and have made it possible for us to serve the interests of pharmacy more fully than could have been done without such aid, and at this time they have by expression and deed given us assurance that we shall be able to carry out our plans on a scale which must ensure success. We start, therefore, full of vigour on our new career, and once again we ask for the lively assistance and co-operation of pharmacists generally. We want THE

CHEMIST AND DRUGGIST to be not only the newspaper for the trade, but also the expression of the views of the trade. We regard it as our primary duty to collect and convey news affecting pharmacy, and we include in that description scientific, political, commercial, legal, and personal subjects. It is our business to publish such news to the extent that our space will permit without a shade of bias. We have no right to let personal prejudices influence us in any degree in the records of events which it may become our duty to publish. On these events we shall no doubt express opinions; but we claim no monopoly of judgment in regard to these, and shall always welcome the temperate exposition of views which may be opposed to our own.

As heretofore, we shall aim, above all things, to be of use to chemists and druggists, and we believe that we can fulfil our wishes in this respect much more efficiently as a weekly than we could as a monthly journal. Our editorial staff is greatly strengthened, and while we shall not abandon any of the features of our journal which have proved of interest and use, we shall be able to introduce other literary elements which will be found of service to readers both at home and abroad. The business of a chemist and druggist is a difficult one, and is becoming increasingly so. Every member of the craft is the better for association with his fellows, and such association is only practicable in a regular way through the medium of the press. A few weeks will show that we shall do our part with energy, and we believe the trade generally can greatly benefit as a body by abundant communion in our pages. Let all opinions be fairly and freely expressed, and let those only prevail which can establish themselves by sound reasons and true practicability.

DISPENSING TESTED.

NINE years ago some sensation was created by the publication of analytical criticisms, first by Mr. Allen, of Sheffield, and next by Mr. William Thompson, of Manchester, on the degrees of accuracy exhibited in the dispensing of physicians' prescriptions. Mr. Allen's report was too vague to have much true significance. He had had twenty prescriptions dispensed, and in three cases he found what looked like frauds on the customers. In one case he found $9\frac{1}{2}$ grains of sulphate of quinine instead of 16 grains; in another instance 30 instead of 40 grains of the same substance; and in a third, 76 grains of iodide of potassium instead of 120 grains. But no information as to the character of the dispensers, whether they were chemists at all, or as to the character of the prescription sent, was given. The report was made to the Town Council of Sheffield, but no prosecutions were undertaken, and therefore no chance of checking the analysis or the report generally was offered. Mr. Thompson's report was much more elaborate. He had had nearly 200 prescriptions dispensed in various towns of England and Scotland; he distinguished large shops from small ones, and he took a great deal of trouble to give every detail as to the prescriptions themselves, measurements, cost, and other interesting points. His results, put into tabular form, looked very bad indeed. For instance, he stated that out of 81 instances, each of which should have contained 120 grains of iodide of potassium, none was exactly correct, and only eleven contained the proper quantity within half a grain. The rest varied between 44 grains and 141 grains, the majority of the errors being towards deficiency. We remarked at the time when we printed the paper (April 15, 1876), that "no man living could dispense a mixture in which a resolute analyst could not discern some imperfection," and the great majority of the cases mentioned gave results which only varied by a

few decimals, and were not more than would indicate the difference between dispensing scales and analytical balances.

We go back to these reports because they are naturally recalled by the 'Inquiry' which has lately been published on the authority of Dr. Seaton, the Medical Officer of Health for Chelsea, and Mr. Otto Hehner, F.I.C., which cannot fail to be read with interest by chemists generally. These gentlemen it seems to us have made their investigations in a very fair manner. They have recognised that dispensing ought not to be tested as if mathematical accuracy were attainable. As coming within the range of practical correctness they have allowed a margin of 10 per cent., which is very much larger than any pharmacist of our acquaintance would assume to be permissible. But they have found in seventeen cases out of fifty that that limit has been exceeded. The cases of such erroneous dispensing as were considered "serious" occurred in the following proportions: At chemists' shops, 2 in 30; at co-operative stores, 3 in 14; at doctors' shops, 1 in 2; at drug companies, 3 in 4.

Many criticisms suggest themselves on this report. The chief one is that it is utterly unfair to submit it for criticism to the organs of the public press. The gentlemen who provide our daily education in those journals are no doubt very admirable guides and authorities on the affairs of Central Asia, but they have shown over and over again that they are utterly incompetent to comprehend any technical topic whatever, especially if there be any trace of percentage or decimal fractions to grapple with. But we cannot agree with those pharmacists who get angry whenever any such investigation as this is undertaken. The enquiry is one which chemists must look for and which they ought to be thankful for. Mr. Hehner is a chemist quite competent to undertake it, and we understand that he offers his reserved portions of samples for examination by any competent authority. We are very sorry that his results should show anything like 7 per cent. of cases of carelessness (for there is evidently no fraud suspected) among the medicines dispensed by chemists; but, so far as his figures go, chemists would seem to be nearly immaculate when compared with Stores, doctors, or Drug Companies. But from such small aggregates no conclusion can fairly be drawn. The lesson of the inquiry is that the few careless or ignorant druggists in our midst are the chief enemies to the whole guild. They bring undeserved dishonour on the whole; and no one should support more vigorously than the vast majority of pharmacists Messrs. Seaton and Hehner's desire for some legal means "to protect the public against gross carelessness in the dispensing of medicines, and to secure greater accuracy in dispensing."

POISONS.

THERE is again some probability that the subject of the sale of poisons may occupy the attention of Parliament. Lord Spencer has apparently not quite decided whether he will undertake the troublesome task or not; probably at the time when Lord Milltown announced his question on the subject, he had not thought of the matter at all. But it is evident that there is a public demand for more precautionary measures than are at present legally required, as is evidenced by continual allusions in the newspapers, and by coroners' juries' verdicts. It is to be hoped, as Lord Milltown said, that if the Lords of the Privy Council resolve on introducing a Bill, they will "take care to avoid some of the mistakes of their predecessors." Nothing but the most perverse ingenuity could succeed in drafting a worse Bill than the one for which Lord Carlingford was responsible last year. Lord Milltown correctly presented two or three objections, which were brought against that measure. It was a grossly unjust asper-

sion to represent by the Bill that it was the sale of poisons by chemists especially that needed particular precautions, and it was a glaring defect that proper provisions concerning the sale of carbolic acid were not included. No class of men more desirous to promote the safety of the public in regard to poisons than chemists and druggists, and with all deference to the wisdom of Whitehall, it would seem to be true, if not grand, statesmanship to consult with those who must be experts before drafting a Bill on the subject. If their lordships should give the Pharmaceutical Council another opportunity of co-operating it is to be hoped that the latter body will recognise the desirability of rendering their assistance with a single purpose, and will not again aim to interline such a measure with any of their curriculum or official schemes.

SWEET SPIRITS OF NITRE AGAIN.

THE Liverpool sweet spirits of nitre case reopens a question which has over and again been debated in our law courts; the present case has nothing novel about it, further than that since the question was last before the public, it has been decided officially that spirit of nitrous ether has a certain and definitely limited component, viz. nitrous ether. The latter fact appears to have suggested the Liverpool cases; at any rate the county analyst, Dr. Campbell Brown, reported that certain sweet spirits of nitre was not of *official* strength. The case was defended by the Trade Association, and the defence was that sweet spirits of nitre is not *Spiritus Aetheris Nitrosi*, B. P. Prof. Attfield was retained—we beg pardon—was witness for the defence, and chiefly through his masterly evidence the case broke down. That evidence amounts to this, that the British Pharmacopœia is clearly laid down as an authoritative definition of substances prescribed by the physician, but the work does not come into force to supersede household drugs and remedies; that every druggist has a right to sell a nostrum recommended by Galen B.C., though modern practice may have suggested an alteration; and that the alteration effected in 1867 on the old sweet spirits of nitre was so marked that the public has never taken to the new, but has preferred the preparation of the old London Pharmacopœia. There was a good deal said in the witness-box regarding the names, but this we believe to be the weakest part of the defence, because it is not applicable in the several divisions of the United Kingdom, and is in itself rather a weak case. The decision of the Court was the only one possible, and the only one satisfactory to the public and to pharmacists.

PEPSINE AND ITS VARIETIES.

IN our correspondence attention is called to a difficulty regarding the kind of pepsine to be used in dispensing, and *apropos* thereof we may direct attention to a paper by Dr. William Murrell in the *Lancet* for February 27. After reviewing the new British Pharmacopœia tests, and showing that the standard is raised 71.5 per cent., Dr. Murrell gives an account of the examination of various specimens of commercial pepsine. He did not find the new method of assay work well in comparative experiments, because of the impossibility of filtration. After numerous trials he found the best method was to take albumen in shavings, and after digesting for four hours at 38° C. to filter through fine muslin; from the air-dried residue the amount digested was ascertained. "Thirteen solid specimens of pepsine were examined, some of English, others of French, German, or American manufacture. They were all active, but in many the proteolytic power was very small. Only four would have come up to the standard

of the new British Pharmacopœia. The name is evidently no guarantee of purity, for a specimen made by a well-known firm was represented by the figure 871, whilst another, sold under an equally well-known name, had to be satisfied with an award of 162, a state of affairs which is hardly satisfactory. The same pepsine is often sold under different names, according to the amount of impurity added."

This is a condition of things far from satisfactory. In reference to the medicinal activity of pepsine Dr. Murrell asserts that to "obtain anything like good results it must be given in doses very much larger than those recommended in the British Pharmacopœia. To give only from two to five grains at a time is a palpable absurdity. The reason that such good results are obtained with pepsine in the treatment of infantile diarrhœa is that it is given in proportionately larger doses. To obtain good results in the treatment of dyspepsia two things are essential—first to test your pepsine, and then to give plenty of it."

A discussion on this subject recently took place in the medical section of the Academy of Medicine in Ireland, as the result of a paper by Dr. Purser, who considers the internal administration of digestive ferments to be irrational, and that the proper use of them is for the preparation of artificially-digested food. Contrary opinion to this was expressed, but, on the whole, the meeting was favourable to Dr. Purser's view that the benefit arises from combined influences (regulation of diet, &c.). Perhaps Dr. Murrell's advice is after all the best, namely, to give plenty of pepsine, if at all. If we think a grain or two sufficient to digest a hundred grains of albumen, what may we consider sufficient for a good beef-steak?

TEREBENE.

REPORTS more or less favourable continue to be received regarding terebene, and various English manufacturers have added it to their list of products. It appears that the new method of treatment is not, after all, the bright idea it was supposed to be, and some old practitioners tell us that they have all along used turpentine, and with even better results than terebene. Attention is drawn to the fact that Dr. Bond's terebene—the "patent preparation"—"acts quite as well therapeutically as the more expensive preparation," and it is within our knowledge that this preparation has been used for a number of years with the antiseptic inhaler in cases of phthisis.

Regarding the tests for the purity of terebene, it is stated that optical neutrality is the only reliable indication of purity. This is a pity, because few chemists have a polariscope, and, moreover, a judicious combination of turpentines may result in an optically inactive fluid.

NOTES FROM THE DRUG MARKET.

FEW of the drugs shown this week require special comment. Japan star anise was again offered, and 16s. was offered for one lot. Five bags of Russian anise, very inferior and mixed with coriander, sold at 29s. There was a parcel of false Pareira brava, for which 23s. was bid; and nearly all the Senega offered was "chumpy" and inferior. A specially fine and large quilled cusparia, seldom seen in the market, failed to find a purchaser at 9l. per lb. Another lot of the exceptionally fine white benzoin was put up for sale, and commanded lower prices than last month. It is seldom that so fine quality as this is seen in our markets. We noticed a parcel of cardamom pericarps exposed for sale. Of two lots of jaborandi leaves put up for sale, one lot had a well-preserved appearance, and, though catalogued as *slightly damaged*, the leaves had a fresh colour, and were remarkably free from broken

material. Cubebs, of which two lots were entered from New York, were a doubtful lot, much contaminated with stalks, and were otherwise inferior and damaged. The gum arabic shown—especially Turkey gum—was on the whole of excellent quality. Cascarilla was a poor show. Of oils, those which we noticed as noteworthy were E.I. castor, a pale sweet oil. Of cinnamon oil some good samples were shown, and they included a sample of cassia oil. A parcel of copaiba balsam was of varied quality. Of Peru balsam there was only one good lot, and it is noteworthy that the only lot bought was the worst, viz. a parcel of sediment.

Trade Notes.

MR. J. F. EDISBURY, Wrexham, has been appointed to the borough bench of magistrates.

* *

MR. THOMAS P. BETHELL, maker of the patent unique folding-box, has removed to Chicago Buildings, 64 Stanley Street, Whitechapel, Liverpool.

* *

MESSRS. MIDDLETON, Kirkpatrick and Barr, chemical manufacturers, of 4 Cullum Street, London, and Newcastle-on-Tyne, have taken into partnership Mr. John A. Guthrie, their manager.

* *

MESSRS. DUKAS & Co., of Red Lion Square, Holborn, wholesale brush manufacturers, who have just commenced to advertise with us, have published a concise and abundantly-illustrated price-list. They do business on the system of the future: "No travellers; no agents."

* *

THE following may be added to the list of registered telegraphic addresses published in the Chemists' and Druggists' Diary, 1886:

CORBYN, STACEY & Co., 300 High Holborn, **Colocynth London**, and for their City offices, 153 Leadenhall Street, **Corbynius London**.

* *

MESSRS. F. NEWBERRY & SONS' catalogue for 1886 has just been issued, and seems more perfect than ever as a list of proprietary articles, English and foreign, very carefully classified. An illustrated list of sundries is also included, and there are a number of advertisements. The volume altogether contains over 400 pages.

* *

THE SANITAS COMPANY (LIMITED).—The ninth ordinary general meeting was held last month, when the report of the directors was adopted, and a final dividend of 5 per cent., together with a bonus of 2½ per cent., both free of income-tax, declared, making with the interim dividend already paid a total distribution on the year of 12½ per cent. Mr. F. H. L. R. Moll, the chairman, said that, notwithstanding the reduction in the selling price of Sanitas Fluid, the increased sales had produced the same revenue in the first ten months over which the reduction extended, and it is confidently expected that a much larger consumption will follow. Mr. C. T. Kingzett seconded the adoption of the report, which was unanimously agreed to. The retiring directors and auditors having been re-appointed, an "extraordinary" meeting was held, at which it was decided to establish a second company, under the title of "The American and Continental Sanitas Company," the capital to consist of 75,000 shares of 1l. The payments for the patents and other rights to be acquired was to be 25,000l. in cash, or fully paid-up shares, which should not rank for dividend in any year until 10 per cent. for such year shall have been first declared upon the preference shares of the company.

MR. R. H. JESSOP has purchased the business lately carried on by Messrs. G. & J. Rushworth, wholesale druggists and drysalter, Eagle Works, Halifax.

* *

MESSRS. JOHN ANGUS & CO., chemical brokers, have removed from 47 Lime Street to 165 Fenchurch Street, E.C.

* *

BRONCHIAL TUBES seem to have had a bad time of it in Cheltenham during the past winter. Mr. R. T. Watson, chemist, tells us he has sold about 4 cwt. of his "Eureka" cough drops, in $7\frac{1}{2}d.$ and $1s. 1\frac{1}{2}d.$ tins, since September last in Cheltenham only; and these, we presume, have not excluded all other remedies. Mr. Watson's lozenges have the advantage of being tempting to the palate.

Obituary.

HENRY SUGDEN EVANS, F.C.S.

WE regret to announce that on Feb. 25 a cablegram was received from New York by Messrs. Evans, Sons & Co., informing them of the death of Mr. H. Sugden Evans from pneumonia. The deceased gentleman was in his 55th year, having been born at Islington, Middlesex, in 1830. Though in some manner lost to British pharmacy during the past few years, the work which Mr. Evans has done in pharmacy, both political and scientific, entitles him to front rank amongst the pioneers of the drug trade. As we say, Mr. Evans was born in Islington in 1830. At that time his father was connected with the well-known London establishment, which, shortly after young Evans' birth, opened a branch in Liverpool. At the age of 11 he was sent to Merchant Taylors' School in Suffolk Lane, where for schoolmates he had Sir Charles Bright, Dr. Pavy, and others less known to fame. After a four years' sojourn in Suffolk Lane he was set to face the realities of life in his father's establishment at Bartholomew Close, and appears to have divided his time during 1845 and 1847 between the firm's London and Liverpool establishments. His duties in these were of a practical nature, and in 1847 he had accustomed himself thoroughly with the working details of his business, and during the time he had not neglected to gather much information regarding the origin and nature of drugs. In 1847, by the advice of the late Mr. Thos. Herring, he was sent to the Bloomsbury Square school, first undergoing at the hands of the late Mr. Henry D. Tarn a classical examination for registration as a student. Once on the roll of the Pharmaceutical Society, Mr. Evans threw himself energetically into the work, and that portion of it of more immediate interest to him (the voluntary curriculum and examinations) he enthusiastically took up, and with such class-fellows as Braithwaite, senr., Giles, Gale, and T. Savory, he helped to sustain the interesting meetings of the students of the Square school, for which so much was done by the laboratory assistants of the time—Messrs. Allechin and Groves. In July 1848, young Evans passed the Minor Examination, and in November following the Major. Previous to this he published his first paper on "Anhydrous Sulphuric Acid." He did not allow his studies to end with the acquirement of the title Pharmaceutical Chemist, for we find him in June, 1849, communicating a paper on "Chromate of Copper" to the Chemical Society, and in November he was elected a Fellow of the Society. Mr. Evans was still in his teens, and so far his record was excellent; and he continued to add to it year by year. We find him aiding Jacob Bell in founding the Liverpool Chemists' Association, and taking an active part in the work of the Association, work which was recognised at the end of the first critical seven years by his appointment as President for two sessions. We have happy recollections of the kind way in which he managed the affairs of the Association, of the influence which his example had upon the members, and particularly of his encouraging behaviour towards the young men of the Association. Had Mr. Evans now stopped at his Liverpool work he had still done enough for general esteem, but there was more extensive work before him. In 1860 he became a member of the Council of the Pharmaceutical Society, and after eight years' honest work amongst the rank and file, he was appointed Vice-President in 1868, and a year later President of the Society. At the time his attainment of the

top rung of the pharmaceutical ladder was considered most fitting: the Pharmacy Bill had just been enacted, and a new era begun in pharmacy. What more fitting than that one who had passed voluntarily through the examinations should be the first to supervise them when they became compulsory? This office he held for one year, and was compelled to forego a second turn owing to business engagements.

Mr. Evans has always taken great interest in colonial trade, and for some years managed a branch of his old firm in Montreal; but this he vacated in 1884 in order to fill the appointment of Chief Analyst to the Dominion of Canada which was offered to him.

ORCHARD.—On February 25 Mr. Herbert J. Orchard (Messrs. Rastrick, Son & Co., wholesale and retail chemists, King's Road, Southsea). Mr. Orchard had been for many years in business at Newport, Isle of Wight, where he attained the highest civic positions, and twice filled the office of mayor. He was also on the Commission of the Peace for the borough. About two years since he purchased the business of Messrs. Rastrick. On February 10, soon after entering his shop, he was seized with an apoplectic fit, which was followed by a paralytic seizure. He was at once removed to his residence, where he laid in a state of unconsciousness till his death. Mr. Orchard was only 45 years of age.

BOWDEN.—On February 5, Mr. Edward Bowden, chemist and druggist, St. James's, London. Aged 75.

EVANS.—On February 9, Mr. Cyrus Owens Evans, chemist and druggist, Hornsey Road, London. Aged 84.

FODEN.—On February 7, Mr. Thomas Foden, chemist and druggist, Manchester. Aged 49.

HUTCHINSON.—On February 5, Mr. George Bassett Hutchinsen, chemist and druggist, Clacton-on-Sea. Aged 42.

MEDCALF.—On January 30, Mr. Ebenezer Medcalf, chemist and druggist, Lower Tooting. Aged 77.

MILLER.—On February 13, Mr. Thomas Miller, chemist and druggist, Birmingham. Aged 83.

MILLS.—On February 1, Mr. John Mills, chemist and druggist, Herne Hill, London. Aged 35.

ROBERTS.—On January 30, Mr. John Roberts, chemist and druggist, St. Anne's-on-Sea. Aged 60.

SCOTT.—On January 25, Mr. Robert Scott, chemist and druggist, Seaham Harbour. Aged 53.

SILVERSTON.—On January 26, Mr. William Arthur Silverston, chemist and druggist, Ipswich. Aged 70.

STUBBS.—On January 31, Mr. Robert Stubbs, chemist and druggist, Woodstock. Aged 57.

Scientific Notes:

On Chemistry, Pharmacy, Botany, Materia Medica, &c., Original, Selected, and Translated.

RUSSIAN TURPENTINE.

THE subject of a paper by Mr. C. T. Kingzett in the *Journal of the Society of Chemical Industry*, January, 1886. The turpentine is obtained from *Pinus sylvestris* and *Pinus ledabourii*, and the statements as to its chemical composition and physical effects are conflicting. These the author reviews, and gives also the results of his own observations on odour, colour, boiling-point, specific gravity, optical behaviour, and oxidisibility. These have reference principally to the production of peroxide of hydrogen, and the experiments are in direct connection with the manufacture of *Sanitas*.

SULPHATE OF ALUMINA.

A PAPER on the composition and methods of manufacture of this compound, by J. Beveridge, is contained in the *Journal of the Society of Chemical Industry* for January, 1886.



PROSECUTION FOR THE SALE OF ALLEGED DEFECTIVE
SWEET SPIRITS OF NITRE.

AT the Woolton Petty Sessions, before Mr. E. Gibbons, Mr. Holbrook Gaskell, and Mr. A. R. Gladstone, on February 19, William Jones, a chemist and druggist carrying on business in Picton Road, Wavertree, was summoned under the Foods and Drugs Adulteration Act of 1875, for selling two ounces of sweet spirits of nitre which was not of the nature, substance, and quality of the article demanded by the purchaser. Mr. Swift appeared to prosecute on behalf of the police authorities, and Mr. H. Glaisyer, Solicitor to the Chemists and Druggists' Trade Association, Birmingham, represented the defendant. Mr. Swift, who opened the case, submitted in the course of his remarks the following analysis by Dr. Campbell Brown, the County Analyst:—

County of Lancaster.

Sale of Food and Drugs Act, 1875.

Sale of Food and Drugs Amendment Act, 1879.

To Mr. Superintendent Barker:

I, the undersigned Public Analyst for the County of Lancaster, certify that I received on the 15th day of January 1886, from Police Inspector T. Peter, a sample of spirits of nitre for analysis, which was then marked No. 517, and after analysing the same, I declare the result of my analysis to be as follows:—I am of opinion that the said sample is of $\frac{2}{3}$ ths the minimum strength of the British Pharmacopœia, 1885, which says that spirits of nitrous ether, which is the drug popularly known as sweet nitre, when tested by the prescribed method should yield when freshly prepared seven times its volume of nitric oxide gas, and even after it has been kept some time and the vessel containing it has occasionally been opened, it should yield not much less than five times its volume of the gas. This sample yields decidedly less than three times its volume.

Observations: No change had taken place in the constitution of the sample that would interfere with the analysis.

As witness, J. CAMPBELL BROWN, D.Sc.

Of the Royal Infirmary School of Medicine in Liverpool.

January 30, 1886.

Mr. Swift contended that the spirit was absolutely worthless, and went on to argue that if it had been dispensed to medical prescription it might be absolutely dangerous, and also that "sweet spirits of nitre" is still an official preparation. Having proved the purchase of 2 oz. of sweet spirits of nitre by Inspector Thomas Peter, on January 14, he called Dr. Campbell Brown, who said he found the sample $\frac{2}{3}$ ths of the recognised minimum strength according to the British Pharmacopœia of 1885, that was to say 5 cc. of the liquid only yielded 14 cc. of nitrous oxide. In reply to Mr. Glaisyer, Dr. Brown said that nothing had been added to the sample in the shape of water. During the past 15 years he had frequently tested this preparation. The potent ingredient of sweet nitre was nitrous ether. The spirit decomposed very rapidly when kept carelessly, or if the bottles containing it were opened frequently, and in the decomposed condition it would not act properly. He was not sure that the P.L. 1836 preparation was not the same as the B.P.

Mr. Glaisyer asked if there was anything in the nature of adulteration, for this prosecution, he reminded them, was for adulteration.

Witness: There is no such word as "adulteration" known in the English law at the present moment, either in this Act, or any other Act of Parliament that I am acquainted with.

Mr. Glaisyer: Is there anything in this sample added to increase its bulk?

Witness: I am of opinion that there was nothing added at all.

Mr. Glaisyer called the attention of the bench to the witness's statements that the sample might have been properly prepared, and that since it was made nothing had been done to alter it.

Dr. Brown then stated in cross-examination that nitrite of ethyl is the potent ingredient in the spirit; he believed this to be so because the Pharmacopœia directed a preparation containing this to be manufactured, and the tests which the Pharmacopœia gave were for the detection of this constituent. He maintained that the old London Pharmacopœias were abolished, and quoted from the preface of the B.P. in support of his statement.

The chairman of the bench having suggested that the Act of Parliament should be adhered to,

Mr. Glaisyer said his case was that this article was prepared in accordance with the London Pharmacopœia of 1809, 1836, and 1851, and that it had been established as a household remedy throughout the country, and that the defendant was justified in selling it. It had never been superseded. It was the old preparation of spirits of nitre.

Dr. J. Campbell Brown: Those Pharmacopœias you mention are out of date. You might as well go back to Galen, B.C. — (Laughter).—I decline to know anything about them except the fact that there was a preparation spoken of in those works. I have endeavoured to forget all about it.

Dr. Brown was then submitted to a long further cross-examination on the characteristics of sweet spirits of nitre and its proneness to decomposition. He stated that it was possible for the spirit to decompose wholly.

After re-examination by Mr. Swift,

Mr. Glaisyer said his defence in this case was that there were two articles well-known in the drug trade, and well-known to the public, and constantly demanded by them. The one was prepared according to the old London Pharmacopœia from certain formulae and in a certain way, and it answered certain tests. In addition to this drug there was a similar preparation made according to the British Pharmacopœia issued last year. It was prepared from different ingredients by a different process, and answered different tests. He contended, and had hitherto contended successfully, that the old preparation could still be sold, for there was no statute which prevented its sale. During the whole of the present century it had been known as sweet spirits of nitre, which was the English interpretation of the Latin name given to it in the Pharmacopœia. That British Pharmacopœia had for its object not so much the selection as the definition of the substances of the drugs which the physician prescribed. It had not come into force to supersede the household drugs, but had simply come into force in order that when physicians prescribed a certain thing they could see that it contained certain ingredients. The sale of the old spirit was 20 times more than the sale of the preparation ordered by the British Pharmacopœia. It was not a question of profit either, because actually more profit was made on the preparation ordered by the British Pharmacopœia.

Professor Atfield (examined by Mr. Glaisyer) said that there are two varieties of sweet spirits of nitre, one prepared according to the London, and the other according to the British Pharmacopœia. The reputation of the article was founded on the older of the two. The old preparation of sweet spirits of nitre had a great reputation, and was known all over the country. If this preparation had the correct colour, flavour, and odour, it was good. He had analysed the sample purchased from the defendant, and his results agreed with those of Dr. Brown, only he believed it to be a very good sample of sweet spirits of nitre. It was the article asked for, the article wanted by the public, and it would be a serious thing to interfere with the sale of it. If a medical man ordered sweet spirits of nitre, it would be the old preparation which should be supplied, but if spiritus ætheris nitrosi, then that would be the modern preparation. It was impossible to say what the active principle of the spirit was, it might be nitrous ether or aldehyd—that had not been settled. He could not say that the article suffered by decomposition of ethyl nitrite—it was possible that it might deteriorate by loss of nitrous ether, but just as possible that the reverse might be the case. It was a matter of common knowledge that the old and new preparations were equal in diuretic effect.

Asked by counsel if he had any old books with him, he produced the London Pharmacopœias 1746 and 1851—which were used to bring out the differences between the names. *Spiritus nitri dulcis* was used in 1746 and *spiritus atheris nitrici* in 1851. If *spt. ath. nit.* were ordered in a prescription written since the publication of the B.P., the latter preparation should be used.

Cross-examined as to his analysis of the sample, he restated that his results agreed with Dr. Campbell Brown's; he had found nitrous ether in it, but sweet spirits of nitre might or might not contain that constituent; that depended on the means taken to condense the distillate in the process of manufacture. The preparation contained aldehyd, certain ethereal substances, spirits of wine, and probably other substances. In the sample he had found aldehyd, spirits of wine, and nitrous ether. Asked what he thought it necessary to test for he replied, "I saw that the preparation was of proper appearance, colour, odour, and flavour, that its specific gravity was correct, and that it contained nitrous ether. The article was purchased as sweet spirit of nitre, and it agrees with all tests for that article; it does not contain the full quantity of nitrous ether which the British Pharmacopœia says a freshly-prepared sample of spirit of nitrous ether should contain, but it was not sold for spirit of nitrous ether."

Witness was then cross-examined as to the Acts under which the British Pharmacopœia is issued, the object of which was to bring out that the Pharmacopœia covered ordinary sales by retail as well as dispensing of medical prescriptions. The witness quoted from the preface to the B.P. to show that the former sales are not included; and re-examined as to the sample supplied by defendant, he stated that he had formed the opinion that it originally had been the B.P. spirit.

Mr. Glaisyer intimated that he had other professional witnesses to call, but

The bench were of opinion that they had heard sufficient to warrant them in dismissing the case.

Mr. Glaisyer asked for costs, but the bench declined to say anything about that matter.

Summonses had also been taken out against Thomas A. Hay, chemist and druggist, High Street, Wavertree, and James Finland, chemist, High Street, Wavertree, for similar offences, and these summonses the bench also dismissed.

LONDON BANKRUPTCY COURT.

ARTHUR HUNT, 94 and 95 Fore Street, Exeter, and Stoke Villas, Old Tiverton Road, Chemist.

At the London Bankruptcy Court, on Monday, February 22, the first meeting of the creditors under this failure was held before Mr. Thomas Andrew, Official Receiver for Exeter. The statement of accounts shows total liabilities 6,237l. 9s. 9d., against assets, cash in hand 25l. 19s. 11d., book debts, good 1,420l. 3s. 10d., doubtful and bad 1,203l. 6s. 4d., estimated to produce 1,410l. 13s. 9d., stock-in-trade as a going concern 3,857l. 7s. 5d., furniture 132l. 13s. 6d., other property 5l., making a total, less preferential payments of 79l. 10s., 4,852l. 4s. 7d., showing a deficiency of 1,380l. 5s. 2d. The debtor attributes his failure to losses by bad and doubtful debts, heavy law costs, and depreciation in the value of his stock. Upon the proofs of Mrs. Euston and Miss Catherine Euston, of Lyme Regis, for 159l. and 66l. respectively, being called, the debtor stated that when he rendered the balance-sheet to Messrs. Snow & Co., the bankers, early in 1885, he had only put down Mrs. Euston's debt at 96l., being of opinion that that was the proper amount. The other not being a trade debt he had omitted it altogether. He only expected to be asked to return the money if he succeeded in business. The debtor had also returned Mr. C. Hunt as a creditor for 100l., whereas his debt amounted to 562l. The chairman said he could not understand these disgraceful discrepancies in the amounts. In examination the debtor said that he had carried on business in Exeter during the last ten years, having previously been in Hong Kong. His capital two years ago was 2,038l. He afterwards received remittances from Hong Kong to the amount of 2,592l., making altogether 4,630l. 13s. 2d., the whole of which was lost in the business.

The first balance-sheet he took showed a deficiency of 1,900l. After the loss had been ascertained he made a clean sweep and reduced his expenses all round. The stock at the present time amounted to 3,357l., this, however, did not include the fixtures. Mr. Prickman, on behalf of the debtor, offered a composition of 6s. in the pound, payable in four, eight, and twelve months. After some discussion, in the course of which it was suggested that the offer ought to have been 10s., the meeting was adjourned until Monday last, March 1, to be held at Exeter, the Official Receiver remarking that he was surprised at the apathy displayed by the London creditors, only two of whom had attended, notwithstanding that the meeting had been held in London for their convenience.



CALVERT'S NEW SPECIALTIES.

MESSRS. F. C. CALVERT & Co. have placed on the market several new carbolic preparations worthy of notice. The physician's box of 20 per cent. carbolic soap is specially designed for ready use after operations, accouchements, &c. The soap is made in 1½ inch by 1 inch transparent tablets, of which there are thirteen in an attractive gold-shouldered case, the odd tablet being enclosed in a metal vest-pocket case. The attractive get-up of this case makes it an ornament to the counter, and it should be brought by chemists under the notice of their medical friends.

The new carbolic tooth soap is in the form of an oblong cake enclosed in a metal box. The soap is pleasantly perfumed, and is a perfect detergent and deodorant. There can be no better smoker's dentifrice.

Fatal accidents with liquid carbolic acid have become so frequent as to imperil its use for household purposes. To meet all objections Messrs. Calvert have devised a concentrated carbolic powder containing 50 per cent. of crude phenol. This is sent out in tin cases capped with a measure to hold a drachm. The powder is applicable to all the purposes of disinfection for which the liquid acid is used. The sixpenny case is capital value, and will command a ready sale.

Another novelty is a patent soluble cresol disinfectant, which forms a milky mixture with water. Of this 8 oz. are given for 6d.

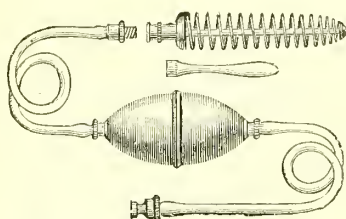
LORIMER & CO.'S NEW SPECIALTIES.

MESSRS. LORIMER & Co., alive to the wants of the season, have brought out two specialties worth notice. The better idea of the two is "The Singer and Speaker's Indispensable Pocket Companion." This consists of five boxes—after the oriental medicine-box style—each box fitting into the other, and containing a piece of Menthol, Phosphorus and Quinine Pilules, Chlorate of Potash Discs, Aromatic Cachous, and Magic Vocalisers. This, in a polished boxwood case 4 inches by 1½ inch, is certainly *multum in parvo*, and no better selection of ready remedies could be put together. The magic vocalisers, composed of chlorate of potash, cocaine, and borax, are said to be so effective as to make a dumb man sing.

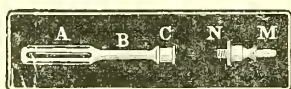
The other novelty is a "Compound Cod-liver Oil Emulsion." This is an agreeable, elegant, and palatable preparation, said to contain 90 per cent. of cod-liver oil, combined with pepsine and hypophosphites. It is put up in six-oz. bottles, which admit a good-sized spoon. These preparations maintain the credit of the firm, and deserve the attention of chemists.

AMERICAN SYRINGES.

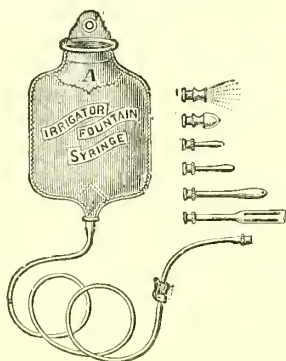
A NUMBER of the manufactures of the Mattson Rubber Company of New York have been shown to us by their English agents, Messrs. E. A. de Pass & Co. of 3 Coleman Street. As regards prices, quality, and in some cases novelty, these syringes seem to be worthy of attention. The Vaginal Spray Syringe is a patent of the company, the novelty con-



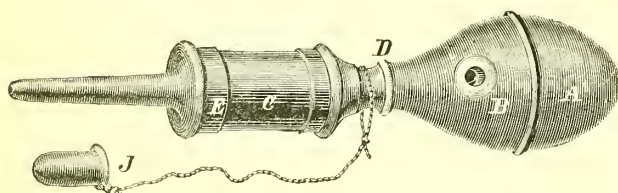
sisting of the celluloid spiral surrounding a tube with lateral perforations. The Vaginal Irrigator is another



patent of the company. It is intended to be attached to any syringe, and supplies lateral ejections. The Fountain



Syringe is not quite new, but is not so well known in this country as in America. The bag, which is of indiarubber, is hung up in a convenient situation, and by means of a long tube injection is most easily effected by using the syringe at a considerably lower level. The Powder Projector is shown in the accompanying drawing, together with a naso-pharyngeal



tube, which is intended for use by surgeons only. The applications of dry powders in spray form, such as iodoform in ulcerations, catarrh powders, anti-parasites, application for the ear, for the skin in eczema and other purposes, are becoming more frequent details of modern medical practice. A cheap form of Higginson's Enemas, and a pretty and low-priced perfume-bottle with spray attachment, also attracted our notice.

Foreign and Colonial.

THE failure is announced of the firm of Garcin père, wholesale druggist, 220 Boulevard de la Magdeleine, Marseilles.

THE Shah of Persia has followed his imperial brother of Turkey in appointing a German, Herr A. Schwerin, as private chemist to his court at Teheran.

THE chemists of the Chemische Fabrik (Schering) in Berlin are said to have succeeded, after long-conducted experiments, in producing aluminium in quantities with considerable profit.

TRADE WITH JAPAN.—While the exports of the United Kingdom to Japan have been steadily decreasing for the last few years, those of Germany have increased 60 per cent. since 1884, the total value being 295,106*l.* in 1883, and 481,352*l.* in 1884. Great Britain exported 2,604,490*l.* worth of goods to Japan in 1884.

TRAVELLERS' PLASTER.—A plaster is now extensively sold on the Continent under this name. It is spread on linen, and put up in an elegant case, each plaster bearing as trade-mark the figure of a tourist. The plaster has an agreeable odour of benzoin, and is in fact nothing but ordinary adhesive plaster containing 10 to 15 per cent. of salicylic acid, and scented with benzoin. It is advertised as an infallible remedy against corns, bunions, &c., and in reality it may possess a virtue in this respect. Diachylon is an old and salicylic acid a new remedy for corns, and the combination of the two appears to be a happy idea.

WHAT IS AN "APOTHECARY."—The Belgian Courts have been troubled about the interpretation of the term "Apothecary" (apothecaire). A law dated 1818 denies to physicians any right to a commercial association with apothecaries, and on that the Correctional Tribunal for Brussels fined a physician 16*l.* for having joined a tailor in exploiting a medical specialty the property of the latter. The Appeal Court confirmed this judgment, thus affirming that any person dealing in medicines was *ipso facto* an apothecary in the eye of the law. But the case has since been argued before the Supreme Court, which quashes the conviction on the ground of false interpretation and false application of the said Act.

NEW FIRMS.—A. Leulier & E. Marie, 4 Rue des Minimes, Paris. Drugs and chemicals. Deed of January 9, 1886. Term 14 years, capital 128,816.40*fr.* Decoster-Agache, 2 Rue du Cirque, Lille. Drugs, dyestuffs, and chemicals. Deed of January 22, 1886. Term 10 years, capital 100,000*fr.* Boudrand & Rureau, Grenoble. Drugs. Deed of January 20, 1886. H. Löwinsky, Berlin. Steam distillery of essences. Willh. Guenste, Bonn, Germany. Drugs and chemicals, wholesale. Joh. Schmitt, Karstadt o/M., Germany. Manufacturer of pharmaceutical preparations. A. Molly, Aix-la-Chapelle. Wholesale druggist. E. Dechevrens, Geneva. Wholesale druggist. B. J. Kersten & Co., Wattenscheid i/W., Germany. Chocolate manufacturers. Rich. C. Schmidt, Wollnerstr. 29, Dresden. Drugs, chemicals, and dyestuffs. Sthamer, Neack & Co., Hamburg. Manufacturers of chemical preparations. E. Jacob, Germania-Droguerie, Leipzig. Drugs, soaps, perfumeries, and specialties.

PROJECTED INTERNATIONAL PHARMACEUTICAL EXHIBITION IN GENEVA.—It is proposed, if sufficient support be forthcoming, to hold an International Pharmaceutical Exhibition in Geneva in the year 1888, in conjunction with a larger one of general interest which is being organised. Among the classes of exhibits which are suggested for the Pharmaceutical exhibit are named pharmaceutical literature, including periodicals, pharmacopœias, instruments and apparatus for pharmaceutical use, drugs, simple chemicals, compound pharmaceutical preparations, and products of elegant pharmacy (including specialties), homœopathic medicines, hygienic and dietetic preparations, military pharmacy, disinfecting products, surgical equipments and dressings, mineral waters, natural and artificial, apparatus for the production of the latter. The Federal Government have promised to afford every assistance for the carriage of goods, and to admit exhibits duty free. Communications should be addressed to Monsieur H. Coëytaux, President *pro tem.*, International Pharmaceutical Exhibition, Geneva, Switzerland.

Trade Report.

Mincing Lane, March 4.

SINCE our last report the tone of the market has steadily improved, and the drug-sales held to-day were decidedly better in tone than the last, many articles selling well at improved prices. Below full particulars are given of all articles of which the price has changed since our last report; the usual detailed prices-current will be inserted in our next issue.

ACIDS.—*Acetic* remains unchanged at 2½*d.* per lb. *Citric* has continued to advance—owing to the rise of lemon-juice prices in Sicily, brought about partly by speculation—and is now quoted at 2*s.* 3½*d.* per lb. spot, or 2*s.* 4*d.* for forward delivery. The transactions in this article have been considerable, and the market closes with upward tendency. *Oealic* weak at 4*d.*, less 10 per cent. *Sulphuric* unchanged. *Tartaric* dearer, at 1*s.* 9½*d.* to 1*s.* 10*d.*; foreign, do., at 1*s.* 9*d.* to 1*s.* 9½*d.* per lb., at which prices, however, no considerable transactions have yet taken place. Market firm.

ALOES.—Large parcels being ordered by American firms, prices advanced in auction on February 18, when *Cape* realised fully 2*s.* over previous value, the 78 cases offered being all sold. In sale to-day the price further advanced fully 1*s.* for this variety; of 119 cases, 43 were sold at 33*s.* 6*d.* for fine hard, 30*s.* 6*d.* to 29*s.* for medium, and 20*s.* for inferior crosso. *Socotrine* were very firm in last sale, and brought full prices in to-day's auction, a good proportion being sold at 7*l.* 2*s.* 6*d.* for good bright to 64*s.* for low ordinary Zanzibar. *Curaçao* have not met with the same favour, none having been sold on February 18; to-day 53 boxes were sold at 52*s.* 6*d.* for good, to 19*s.* for low quality.

AMBERGRIS.—Four tins offered in last sale did not find purchasers, the pretensions of holders being thought too high; to-day one tin fine grey quality realised 80*s.*; two others bought in.

ANNATTO.—A parcel of 122 baskets roll was advertised for sale to-day, but has not been offered owing to delay in landing. It will be placed in sale on March 18.

ANTIMONY.—Small sales at 17*l.* per ton for crude Japanese are reported, but the article remains lifeless. Fifty boxes crude Japan in sale to-day are held at 17*l.* 10*s.* We hear that the new company started in Italy a short time ago do not intend to confine their operations to mines in that country.

ARGOL.—The advance reported in our last has not been maintained, the demand has slackened, and sales were made of dusty and common grey Cape at 60*s.* to 78*s.*, dusty red ditto at 65*s.* per cwt.; 44 bags offered to-day were bought in.

ASPHALTUM.—In sale this day 38 packages Syrian lump and broken found no buyers.

BAEL FRUIT.—57 bags low dirty held at 2½*d.* per lb., 1½*d.* being refused.

BALSAMS.—*Canada* remains inactive, 6 kegs offered on February 18 being withdrawn at 1*s.* 4*d.* per lb. *Capivi* also without improvement. Values remain unchanged, and at Liverpool about 15 casks Maranham and Pauá have found buyers at 1*s.* 3½*d.* to 1*s.* 4*d.* per lb.; 25 cases offered in drug sale to-day did not meet with any offer. *Peruvian* remains flat; 7 cases held at 5*s.* 6*d.* per lb.; one jar sediment realised 4*s.* per lb. *Tolu.*—Our stock is large, and the article meets with little inquiry. On February 18 a parcel of 10 cases spurious balsam sold readily at 3½*d.* to 4½*d.* per lb. without reserve, but for the genuine article there was no demand.

BALSAM OF PERU BARK.—A parcel of seven bags of this bark (*Myroxylon Percira*) was put up for sale on February 18 and withdrawn. This lot differed considerably from any hitherto offered. It will be remembered that a lot imported two years ago was in chips and quite saturated with balsam, so much so that slight pressure with the finger nail was sufficient to cause "sweating." Another parcel offered lately was in larger pieces, and though not so rich in balsam yet appeared to be scorched bark. The parcel which we now refer to is comparatively valueless; it is unscorched, contains extremely little balsam, and appears to be suitable only for grinding as a basis for incense or fumigators. The present parcel is more resinous than any previously offered, but the cinnamon odour is weak.

BEANS.—*Calabar.*—Holders display great firmness, stocks being very slight. In sale to-day 3 bags were bought in at 5*d.*, a bid of 4*d.* being declined. *Tonquin* quiet; 1 case Surinam sold at 1*s.* 7*d.*

CAMPHOR (CRUDE).—*China.*—None offering. *Japan.*—On February 18, 100 out of 431 tubs offered sold at 69*s.* to 70*s.*, being a fall of 2*s.* 6*d.* per cwt., and since then the market has shown further weakness. In to-day's sale 261 tubs found no buyers.

CANTHARIDES having become somewhat less scarce, the demand has grown slower. In the last sale a bid of 5*s.* 5*d.* for 4 cases small dark China was refused, and the parcel withdrawn at 5*s.* 9*d.* per lb. nominally. To-day 16 cases China and 5 cases good sifted Spanish were offered and bought in.

CARDAMOMS.—On February 18 the auctions opened with a decline of 3*d.* per lb., but this was more or less recovered as the sale proceeded. To-day the market has shown a decided improvement, and prices ruled fully 3*d.*, in some instances 6*d.* higher, nearly the whole of the 235 packages offering finding buyers. The following prices were realised:—*Mangalore*, fair to good pale and plump, 2*s.* 6*d.* to 2*s.* 8*d.*; fine pale ditto, 3*s.* 4*d.* *Malabar* kind, good pale plump, 2*s.* 8*d.* to 2*s.* 9*d.*; ditto, smaller size, 2*s.* 2*d.* to 2*s.* 6*d.*; small, 1*s.* 11*d.* to 2*s.* 2*d.*; brownish, part open to fair, 1*s.* 5*d.* to 1*s.* 9*d.*; thin, partly open to small, 1*s.* to 1*s.* 2*d.*; inferior dull, unclipped, 10*d.*; low, 6*d.* to 8*d.* Low to fair native Ceylon sold at 6*d.* to 1*s.* 2*d.* per lb.; seeds, 1*s.* 3*d.* to 1*s.* 6*d.* Private advices state that the cultivation of cardamoms is being extensively increased all over Southern India, both by Europeans and natives, especially the latter, who are following the example of Europeans in planting up their jungles, and picking the fruit as it ripens, instead of stripping the racemes as they used to do. As a result, prices in the local market have declined in the last three years from 70 rupees to 20 rupees per maund of 28 lbs. (4*s.* 7*d.* to 1*s.* 4*d.* per lb.), and it is thought they will fall still lower.

CARNAUBA.—Quiet, with sales at 30*s.* to 50*s.*, according to quality.

CASCARILLA.—On February 18 thirty packages were offered, of which eight sold at 27*s.* per cwt. To-day 130 out of 116 packages realised 24*s.* to 27*s.* for medium to fair; one lot woody and second-class sea-damaged, 22*s.* 6*d.* per cwt.

CUSPARIA BARK.—A parcel of 3 bales, unusually fine long quill, remained unsold, a bid of 8½*d.* per lb. being declined. The lot is held at 9*d.* per lb.

CHEMICALS (Various).—*Alum* in limited demand, and quoted at 5*l.* 10*s.* per ton for loose lump, 6*l.* 2*s.* 6*d.* for ground, ex warehouse. *Ammonia* (carbonate) rules at 4*d.* net in casks; demand slow. Ashes cheaper, and quoted at 21*s.* 6*d.* for first Montreal pots; pearls easy, at 41*s.* to 42*s.* per cwt. *Borax.*—In Liverpool concentrated Californian has sold to a moderate extent on the spot at 27*s.* to 27*s.* 6*d.* per cwt.; whilst, to arrive, some business has been done at rather less than the equivalent of the former figure, but there are not free sellers thereat. English is obtainable at 30*l.* *Bleaching-powder* steadier, at 7*s.* to 7*s.* 3*d.* per cwt., ex warehouse. *Calomel* still quoted at 2*s.* 7*d.*, and *Corrosive Sublimate* at 1*s.* 11*d.* per lb. *Cream of Tartar* firm, at 126*l.*

ex warehouse for first white. *Bromide of Ammonium* cheaper, at 2s. *Bromide of Potassium* also lower, and quoted at 1s. 7d. per lb. *Camphor* (refined), $\frac{1}{2}$ d. per lb. cheaper; bells at 1s. $\frac{1}{2}$ d.; flowers at 11 $\frac{1}{2}$ d. per lb. *Cocaine* easier, and in plentiful supply. The business transacted in the United States during the latter half of February is said to have been the largest on record. There are at present five manufacturers of cocaine in the United States. *Iodine* (resublimed), 15s. 4d. per lb. *Strychnine* slightly cheaper. *Magnesia*, *Citrate*, 1s. 3d. per lb. *Soda Nitrate*.—We hear from Liverpool that this article has continued steady throughout, on the spot, with a fair business, at 11s. to 11s. 3d. per cwt.; for forward delivery some business has been done at 10s. 3d. per cwt. June July, and, to arrive, very considerable transactions have occurred, including a cargo, February-March sailing, at 10s. 3d. for U.K. or 10s. 6d. for Continent, and March-April at 10s. 3d. per cwt., U.K.; during one week large arrivals at port of call, amounting to 7,000 tons, were ordered on to the Continent, the only sale out of that quantity actually reported, however, being 1,100 tons at 11s. 3d. per cwt. Crystals have continued to drop, and are now quoted 48s. 6d. per ton ex ship, London. Ash.—A few orders passing at 1 $\frac{3}{4}$ d. per degree per cwt. landed. Bicarb. steady, and a moderate business doing at 7l. 12s. 6d. per ton landed. Caustic in better demand, and the higher quotations from Liverpool give more firmness to this market. 60 per cent. white we quote 8s. 3d. to 8s. 6d., cream 8s. per cwt. ex warehouse. *Sugar of Lead* is better at 22s. 6d. to 23s., owing to the rise in price of pig lead. *Sulphur* quiet, and only a few small orders passing. Rolls, 8s. to 8s. 6d. per cwt.; flowers, 9s. to 10s. per cwt. *Saltpetre* dull. English refined 21s. 3d. per cwt. for barrels, and 22s. 3d. kegs. *Mercurial Ointment*, 1s. 3d. per lb. *Precipitate*, red, 2s. 10d.; white, 2s. 10d. per lb. *Pill*, blue, 1s. 8d. per lb. *Hydriodate*, 11s. per lb. *Terebene* and *Urethane*.—Messrs. Howard & Sons inform us that these two preparations are greatly increasing in favour. They have considerably reduced the price of both, and now quote terebene, free from turpentine-odour, rotation under 0.5°, at 3s. 8d. per lb.; urethane in 1 oz. vials at 2s. per oz. *Vermillion*, 2s. per lb. *Glauber's Salts* cheaper, and quoted at 4s. to 5s. per cwt., according to size of casks. *Citrate of Iron* dearer, at 2s. 6d. per oz. *Citrate of Iron and Ammonium* also higher, at 2s. per lb.

CINNAMON.—At the second of the monthly sales held on 22nd inst. a total of 1,734 bales Ceylon was offered (against 1,476 bales in February), consisting of a fair assortment of all qualities. A very languid demand existed, and the quantity disposed of at and since the sales was at a decline of 2d. to 3d. per lb. for good and fine kinds, and $\frac{1}{2}$ d. per lb. for middling and common. About 500 bales sold—fourths, ordinary at 5 $\frac{1}{2}$ d., good at 6d.; thirds, ordinary at 6d. to 6 $\frac{1}{2}$ d., good at 7d.; seconds, ordinary at 7 $\frac{1}{2}$ d., fair at 8d. to 8 $\frac{1}{2}$ d., fine at 1s. 3d.; firsts, fair at 9d. to 9 $\frac{1}{2}$ d., fine at 1s. 6d. to 1s. 7d. per lb. *Chips* steady; of 320 packages about 150 packages sold, cuttings, quillings, &c., at 4 $\frac{1}{2}$ d. to 5 $\frac{1}{2}$ d., ordinary at 2d. to 2 $\frac{1}{2}$ d. per lb.

CIVET.—3 horns sold at 7s. per oz.

COCHINEAL is easy, with small private sales of silvery Tenebris at 1s. 2 $\frac{1}{2}$ d. per lb.

COCCULUS INDICUS.—Of 50 bags Cochín, 20 sold at 9s. per cwt.

COLOCYNTH.—Of 17 packages Turkey, one case good fragment, free from seed, realised 2s. 7d., and 1 bag fair siftings 1s. per lb.

CUBEBS are decidedly dearer; on February 18, 3 bags good quality, slightly mixed with stalks, fetching 15l. 15s. per cwt., and 20 bags fairly good berries but very stalky and dirty, 15l. per cwt. One bag stalks bought in at 70s., a bid of 40s. not being accepted. To-day only 7 bags, shipped from New York, were offered, and sold at 13l. 17s. 6d. to 14l. 5s. for bad to slightly sea damaged and mixed with stalks.

CUSCUS ROOT.—25 bales held at 25s. per cwt.

DRIED FLOWERS.—A lot of four bales, placed in auction on February 18 under this name, retired unsold, merchants and brokers not appearing to have any clear idea of the name

or use of the article. These four bales consisted of the pressed flowers of the Tissoo, or Pulas-tree (*Butea frondosa*), a native of Hindostan, and which used to produce an orange or yellow dye. So far as we are aware, they have not hitherto been placed on the London market, but a specimen was shown in the Indian department of the Edinburgh Forestry Exhibition.

ERGOT OF RYE has been slightly easier, and 36 bags offered in last sale remained unsold, a parcel of bold but wormy Spanish being held at 1s. 6d. per lb. To-day 34 packages met with no response and were all bought in.

ESSENTIAL OILS.—*Aniseed* quiet; in last auction none was sold, but privately retail sales took place at 6s. 5d. to 6s. 6d.; in sale 10 cases China unworked held at 6s. 5d. per lb. *Bergamot* scarce and considerably dearer; the latest quotation is 11s. 3d., with a prospect of further advance. *Cassia* very dull, 3s. 5d. being nearest value. *Cinnamon*, 10 cases bought in. *Camphor*, 154 cases bought in. *Caraway*, 1 case bought in. *Citronella* steady, at 1 $\frac{1}{4}$ per oz.; 154 cases all bought in. *Cubebs* dearer, in sympathy with berries. *Lemons* continue to advance. Reports from Sicily as to the result of the crop being very unfavourable, the present quotation is 11s., but a further rise would not be surprising. *Limes* dearer, St. Thomas being quoted at 15s. *Nutmeg*, 1 case white Batavia sold at 5 $\frac{1}{4}$ d. *Orange* dearer, and quoted at 10s. 6d. for sweet, and 27s. 6d. for bitter, f.o.b. Messina. *Peppermint*.—On Feb. 28 a parcel of 18 cases imported from New York, but of no stated brand, was withdrawn at 22s. nominally. H. G. Hotchkiss quoted at 18s. 6d. to 19s. according to quantity, being lower than in America. Japanese in crystals cheaper, with sales at 15s. per lb. In last sale 3 cases medium crystals were bought in at 17s. to 18s. To-day one case held at 18s., a bid of 17s. being refused. *Sandal-wood* firmer. *Spearmint* scarcer and held at high prices.

GALLS.—China.—this market has again been subject to some fluctuations; early in the fortnight 50 cases fair Shanghai were offered by auction, and sold at 66s. 6d., later about 200 cases sold 67s. to 69s. Last week, on receipt of news of advanced prices in China, a demand sprung up and about 300 cases sold at 70s. to 72s. 6d., market closing very firm. Japan and Corea are scarcer and steady. Turkey in sluggish demand, with small sales at 51s. for green, to 62s. for good blue. In sale to-day 663 packages, mostly withdrawn, 60 sold before sale, and 36, all more or less damaged, at 45s. for green to 55s. for mixed.

GUAZA.—Of 69 bales 4 were sold, good bold, but slightly sea damaged, at 4 $\frac{1}{2}$ d. per lb.

GUM ARABIC.—The last auctions were held on February 25, when 2,804 cases were offered, about 370 of these being without reserve. Buyers, however, held aloof, and it was only at great sacrifice on the part of the holders that about 720 cases were disposed of. Since then the market has been flat, and ordinary East India kinds especially have sold at considerably lower prices. *Barbary*.—*Amrad* has given way some 10s. per cwt. sales having been made as low as 89s. to 90s. per cwt.; 95s. is generally asked, but owners are open to offers. *Brown*.—Quotations are nominal. *East India Gums*.—Some 2,700 packages of all kinds were offered last week, and about one-fourth sold, some classes at a reduction of 10s. to 20s. per cwt. *Aden* sorts.—About 50 packages sold at 90s. to 96s., a fall of some 3s. per cwt. *Barbary* character.—A parcel sold at 86s. to 90s., a reduction of about 18s. per cwt. on the average. *Fine Amrad* was withdrawn, but fair brown gum sold at 64s., a fall of some 16s. per cwt., and red pickings at 58s. to 62s., a fall of 10s. to 12s. *Ghatti*, fair to good, brought 40s. to 46s. per cwt., and ordinary part woody, 30s. to 32s. 6d., showing a reduction of 5s. to 10s. per cwt. Since the auctions a fair business has been done in red East India at 95s. and *Ghatti* at some advance on sale rates. *Senegal*.—The market is fairly supported, but we do not hear of any transactions. *Turkey* sorts.—Four bales sold in auction at 10l. 2s. 6d. per cwt. for good pale gum, being again lower. Privately we do not hear of any business worth noting. Of 218 packages offered to-day, only a few were sold, viz., 2 bales good Turkey sorts at 11l. 10s., 2 serons Turkey siftings at 56s., and

(without reserve) 12 bales Aden small dusty, partly reddish mixed, at 75s. to 79s.

GUM AMMONIACUM.—39 cases offered to-day met with a good demand, the greater part selling rapidly, good small drop and grain at 49s. 6d. to 52s. 6d.; darkish, more or less woody and blocked, 27s. to 36s.; clean siftings at 17s. Seven cases good pale sorts held at 55s.

GUM BENJAMIN.—In last sale Siam was firm, and Sumatra quality steady. In this day's auction no Siam was offered, while of 112 cases Sumatra, Penang, and Palembang the following lots were sold:—10 cases good to fine II. Sumatra, 9l. 15s. to 10l. 15s.; 26 cases fair almondy II, Penang, 7l. 2s. 6d. to 7l. 7s. 6d.; 1 case very good Palembang at 6l.; 2 cases ordinary II. Sumatra at 97l. 6s. A parcel of 9 cases very fine I. Sumatra, almost as good as that which was eagerly bought at high prices a month ago, now found no buyer at 15l.

GUM ELEMI.—27s. refused for 4 cases yellowish and dirty quality.

GUM GALBANUM.—Two cases bought in.

GAMBOGE remained without change in last auction. For to-day 11 cases were catalogued, of which one was sold before auction, and two, second-class sea-damaged, fair colour but blocky, realised 12l.

GUM KINO.—Seven cases fair quality sold at 40s.

GUM MYRRH is offering mostly in middling and inferior qualities, which meet with but scant inquiry. In last sale a parcel of 5 cases bdellium imported from Bombay was offered as gum myrrh, and sold at 19s. per cwt. In to-day's sale the article was firm, Aden sorts, fairly good pale, selling at 5l. 2s. 6d., picked at 7l. 10s., coarse siftings at 65s., and ordinary pickings at 40s.

GUM OLIBANUM realises full prices; 227 cases 146 bales Bombay lately offered and one-half sold, viz., good drop at 49s. to 50s., badly-garbled drop at 42s. 6d. to 43s., pickings at 11s. to 12s., and siftings at 12s. per cwt.

GUM SANDRAC dull of sale, and 86 barrels were all bought in at 60s. to 90s. per cwt., according to quality. To-day 37 casks, all bought in.

GUINEA GRAINS.—Seventy-three bags all bought in.

GUM TRAGACANTH in restricted demand with small sales.

HONEY.—From Liverpool we hear that the demand continues very poor, and is almost confined to the lower grades; 112 tierces of Cuban have been sold at 17s., and about 150 barrels Chilian at 18s. to 25s. 6d. per ewt., according to quality. For to-day's sale 677 packages were catalogued, of which 500 cases Californian went off well at 26s. to 34s. for sorted, 20s. to 27s. 6d. for unsorted.

IPECACUANHA.—In last auction 51 serons Rio were offered, about one-half of these finding buyers at a decline in value of 2d. per lb., but in to-day's sale the market was steady. Of the small supply of 23 serons about one-third sold, good picked, 4s. 3d.; good sound, part slightly damaged, 3s. 7d. to 3s. 8d.; middling to fair, 3s. 1d. to 3s. 4d. per lb.

JUICE.—Concentrated *Lemon* has again advanced considerably since our last, the latest quotations being 35l. to 36l. per pipe f.o.b. Messina. Mr. D. Magnus, of 3 Cross Lane, E.C., states the imports from Sicily into London and Liverpool, during January, at 1,087 pipes in 1883, 866 pipes in 1884, 1,146 pipes in 1885, and only 227 pipes in 1886. *Raspberrry.*—One cask held at 50s.

KAMALA.—Four cases sold at 7d.

LEAVES.—*Bay.*—Thirty-one bags St. Lucia advertised for sale without reserve found no buyer. *Buchu.*—Four bales good long, narrow bought in at 1s.; 8 small round sold at 2½d. to 3½d. per lb. *Coca* slightly firmer; none offered in sale this day; a parcel of 19 bales good quality, brown and green mixed, has just arrived. *Jaborandi.*—7 bales good green held at 9d.; one bale, badly damaged and discoloured, sold at 2d. per lb.

MOSS.—*Iceland.*—Twenty bales of good quality held at 15s. *Irish* in very moderate demand at late rates; in sale to-day 4 bales of inferior quality were bought in.

MUSK.—On February 18, 23 packages Tonquin were offered for sale, which nearly all realised full prices. In this day's auction 45 packages pod and 8 bottles grain musk met a good demand, and nearly the whole of the Tonquin musk sold at an advance, viz.: Pile I., small to bold pods, thin skin and underskin, good yielding, at 76s. 6d. to 78s. per oz.; ditto, fair shape, well trimmed, fairly dry, but not so thin in skin, 64s.; Pile II., good but very thick skin, 31s. 6d.; Pile III., very good but false packed, 36s. 6d. to 41s.; ditto ordinary rough, partly damp, 16s. 6d. to 20s. 6d.

NUX VOMICA.—Forty bags good Cochin sold at 11s. 6d. to 12s. per cwt.; 5 bags very low Calcutta at 5s. 6d. per cwt.

OILS.—*Castor* (E. I.).—The tone of Calcutta and English markets shows a decided improvement compared with last month, with increasing business at higher rates. The latest transactions mentioned from Liverpool include good seconds, spot, at 3½d., and for arrival at 3 l. 16d. per lb. *Cod Liver.*—The new Norwegian is now coming to hand of fine quality, at rather lower prices. This year the weather has been fair, and the fish in good condition, but latest reports from Norway mention stormy weather. *Olive Oil* in limited request, and transactions have been at lower prices. Mogador 34l. 10s., and Spanish 37l. 10s. to 38l. 10s. per tun at Liverpool, according to quality. The new crop now arriving is, on the whole, of fine quality.

OPIMUM in very limited request at former quotations.

ORANGE-PEEL neglected. In sale to-day the large supplies, chiefly of new Malta, met with no demand; 180 bags very common quarters imported from Havre sold at ¾d. to 1d. per lb.

PAIREIRA BRAVA.—A bid of 23s. for 30 pockets spurious quality, was refused and the parcel bought in at 27s.

QUICKSILVER.—The importer has reduced his price to 5l. 15s. per bottle, second-hand holders quoting at somewhat lower price. The American papers continue to forecast the approaching exhaustion of the Californian mines, pointing out that the production has fallen off by nearly one-half since 1881, and that none of the ten mines now worked in California paid a dividend last year. The low price of silver has shut out quicksilver as an article of export to China, and it has also seriously cut down the profits on shipments to Mexico. In this condition of affairs all the mines would be compelled to cease operations were it not for the *ad valorem* duty of 10 per cent. placed on the quicksilver produced by cheap labour at the rich mines of Almaden, Spain, and Idria, Austria, owned and worked by the governments of those countries. The moral of these forecasts is that, to make this industry fairly remunerative it will be necessary for the U. S. Government to foster it by a further duty of not less than 10c. a lb., and even that would leave the strength for survival one of great uncertainty and difficulty.

QUININE BARK.—The auctions have comprised a rather larger total quantity than at the last few series; the general tone was quiet, but with a good demand about one-half of the offerings changed hands, without material alteration in values. *Ceylon.*—The catalogues included 30 cases 1,990 bales; the assortment again consisted largely of medium and common barks, fine analysis being very scarce; the demand continued of good extent, and fully 1,700 packages were sold, the unit value remaining the same as at the last sales; a few lots of Calisaya, of common quality, met with scant favour from the trade, and sold at 1½d. per lb. *East India.*—Ninety-nine bales were offered, chiefly Nilgiri grown, of which about 70 bales sold, at and since, at steady prices. *South American.*—Importers put forward rather larger quantities, principally Cuprea, but the attention of the trade was fully occupied with the Ceylon sorts, and of 1,840 serons and bales only 80 bales sold, Calisaya quill at 1s. 3d. to 1s. 4d., and Pitayo at 9½d. to 11½d. per lb. Twenty-five packages from St. Thomas, from whence a few consignments are coming now and then, sold at prices on a par with those ruling for Ceylon. The unit is now quoted at 4½d. to 5½d., the latter price being obtainable for good red barks. The shipments from Ceylon to January 28 are 5,234,677 lbs., against 3,063,501 lbs. to the same time last year. From the mail advices last week we learn that the arrivals from the interior

are falling off to a very considerable extent. From Java the exports to December 31 show an increase of 90,000 lbs. over those of last year, 700,000 lbs., against 610,000 lbs.

The following is the general range of prices during the present and the previous year:—

	1885		1886	
South American (per lb.)—	s. d.	s. d.	s. d.	s. d.
Calisaya, flat	1	3	2	8
“ quill	1	0	3	6
Carthagena, fair to fine ..	—	—	0	9
“ ordinary to mid. ..	—	—	0	3
Columbian, good to fine ..	1	1	1	9
“ ordinary to fair ..	0	6	1	0
Crown, Loxa	0	5	1	10
Grey (Huanuco)	0	4	1	5
Maracaibo	0	3	6	—
New Granada	—	—	0	6
Pitayo, hard	0	3	0	10
Red, flat	2	0	10	0
“ quill	1	0	3	6
Caprea	0	2	2	0

East India and Ceylon (per lb.)—

Crown—

Twigs and branch ..	0	2½	to	1	0
Chips and spoke shavings ..	1	0	1	7	—
Root	0	9	2	0	—
Quill, ordinary to fine ..	—	—	—	—	—
Renewed	1	0	2	4	—

Red—

Twigs and branch ..	0	1½	0	5	—
Chips	0	4½	0	10	—
Spoke shavings ..	0	5	1	0	—
Root	0	5	1	0	—
Quill, good to fine ..	1	0	2	6	—
“ ordinary to fair ..	0	6	0	11	—
Renewed sorts ..	0	7	1	7	—
Calisaya	0	3	2	6	—
Hybrid	0	3	2	9	—
Ledgeriana	0	3	2	9	—

For to-day's sale 210 packages were catalogued, of which 40 sold; Calisaya: South American fine bold silvery quill, 2s. 2d.; flat yellow, good colour, 1s. 4d. to 1s. 8d.; crown Guayaquil, good silvery to stout quill, 1s. 1d. to 5d.; spurious, fibrous, and broken, 3d. per lb.

RHUBARB has been very dull of sale throughout the second half of February. 185 cases offered to-day excited little interest, only 37 being sold, at the following prices:—Shensi, round, small to bold, good bright colour and fracture, 2s. 9d.; ditto, flat, ordinary to low middling quality, partly dark, 1s. to 1s. 4d.; ditto, round, small to middling root, dull colour, 1s. 1d. to 1s. 3d.; Canton, flat, small to bold, dull colour, 1s. 1d.; ditto, round, rough in coat, and wormy, 10½d. to 11d.; ditto, low, dark, flat and round mixed, 9½d. to 10½d. per lb.

ROSE FLOWERS.—On February 18 a further supply of 53 packages, freshly imported from Bombay, was offered and bought in at 3d. per lb., a bid of 2½d. per lb. not being entertained. To-day 3 bales very dusty and small bought in.

ROSE OIL.—81 vases bought in.

ROOTS.—*Alkanet*.—Four bales out. *Colombo*.—Three hundred and thirty-eight bags in sale, all bought in or withdrawn. *Galangal* in little demand; in to-day's sale 306 packages all bought in. *Rhatania*.—Seven bales, all bought in. *Scammony*.—Hundred and fifteen bales all bought in. *Snake*.—Two bags ordinary quality, faint odour, held at 2s. 6d. *Seneka* meets with good inquiry, and 13 packages were sold, very small root, dull colour and fibrous, 1s. 4d.; fair but rather chumpy, 2s. 2d. per lb.

SANDAL-WOOD.—Hundred and sixty-eight packages, all bought in.

SARSAPARILLA has maintained its position. In to-day's sale 95 packages were offered, of which 33 packages sold: Guayaquil, fair quality, partly damaged, 9d. to 11d.; Honduras, good appearance, 1s. 6d. to 1s. 7d.; Jamaica, red, 1s. 1d.; grey, partly damaged, 1s. 6d. per lb.

SCAMMONY, cheaper and neglected. Of 10 cases catalogued for to-day, 3 were reported sold previous to auction, the rest was bought in.

SOY.—China.—Quiet, but little doing; 45 casks in auction met no offers and were withdrawn; further heavy arrivals have taken place: 10 cases Japan bought in.

SEEDS.—*Anise*.—There is but little inquiry for China star. Spurious Japan continues to be offered, but, whatever may be done privately, none are sold in auction, a bid of 16s. being declined as too low. Turkish cheaper with sales at 32s. per cwt. in Liverpool. Russian firm: five bales sold at 29s. The market for *Canary* has been quiet during the past fortnight, and the bulk of the recent supplies had to be taken to store, as no large orders were pressing for execution. Prices for Turkish seed have suffered no change and remain at 44s. to 48s. according to quality, while Dutch is held at 50s. to 52s., and Barbary at 50s. to 55s. per 464 lbs. ex warehouse. Spanish continues very firm, and extra qualities are scarce and command fancy prices. *Carraway* is quiet but unchanged at last rates; 231 bags bought in. *Croton*.—15 bags sold at 44s. *Cumin* very scarce and dearer, especially for fine qualities; 110 packages offered to-day all bought in. *Fennel* flat at 22s. per cwt. *Fenugreek* has gone dearer and closes firm, stocks having diminished considerably; considerable quantities are said to have been reshipped for the East. Finest quality bright seed fetches up to 7l. 10s. per ton ex warehouse, Egyptian 6l. to 6l. 5s. In sale to-day none were sold. *Linsced*.—The rumours of a short Indian crop do not seem to be confirmed. The available stocks, however, are comparatively small and prices well maintained. Calcutta 45s. to 45s. 6d., Bombay 46s. to 46s. 6d. per 416 lbs. ex warehouse London. Dutch 54s. to 55s. per 416 lbs. *Musk*.—Of 13 packages, 2 cases sold at 1s. per lb. White *Mustard* without alteration at 7s. to 8s. per bushel for medium, 10s. to 11s. for fine. *Quince*.—9 packages all bought in, 1s 5d. being refused for 2 barrels. *Rape* firm at 43s. to 48s. for English seed. German rape steady at last prices. Fine qualities scarce.

SENNA.—In good demand, at full and partly higher rates. Of 106 packages 37 were sold, Alexandria, fragments of very fine quality, 1s. 1d.; 2 fairly good to fine, but slightly sea-damaged, 7½d. to 1s. 1d.; good siftings, 7d. to 8½d. per lb. Tinevelly, small and common to medium, 2½d. to 5d.; one lot badly sea damaged at 1d.

SPICES.—*Pepper* again easier. The latest prices paid are 6½d. for black Lampong; 7d. to 7½d. for grey to good black Singapore; 7½d. for black Alleppy; 11½d. for good white Singapore; and 11½d. for good white Siam. *Chillies* cheaper. *Pimento* dull at 2½d. for good Jamaica. *Cassia Lignea* has declined still further, but closes a little steadier, with sales of 3,500 boxes, at 26s. per cwt. *Cloves*.—Zanzibar firm, and in good demand, with sales at 6½d. to 6¾d. for fair to good. *Nutmegs* quiet, at previous prices. *Mace* steady.

SPONGE.—One bale sold at 1s. per lb.

SQUILLS.—16 bags all bought in.

STORAX.—10 barrels bought in.

SULPHATE OF AMMONIA.—As we anticipated, a further rise has occurred, the prices quoted now being 11l. 10s. at London, 11l. 7s. 6d. at Hull, for Gray's 24 per cent.

SULPHATE OF COPPER has experienced no further alteration ordinary firsts still being quoted at 14l. 10s.

SULPHATE OF QUININE.—More inquiry has been experienced lately, and Howard's make is held at firm rates, while German and Italian makes in bulk have risen 1d. per oz. since our last report. We append a statement of the present official quotations of sulphate quinine and other preparations.

Quinine Sulphate—	One Oz. Bttles.		Bulk	
	s. d.	s. d.	s. d.	s. d.
British, Howard	per oz.	3	3	3
Whiffen	3	0	2
French, Pelletier	3	1	—
Thomas
German, Brunswick
Frankfort (Zimmer)
Mannheim (Boehringer)
Stuttgart (Jobst)
Auerbach
Dutch, Amsterdam
Italian, Fabbria Lombarda

Quinine, &c.—*cont.*

		One Oz. Bottles. Bulk	
		s. d.	s. d.
Quinine, Hydrochlorate ..	British	3 9	—
Quinine, Valerianate ..	"	4 4	—
Quinidine, Sulphate ..	"	1 6	1 4
Cinchonine ..	"	—	0 9
Cinchonine, Sulphate ..	"	0 5	0 4
" ..	German	0 4	0 3
Cinchonine, Mariate ..	British	0 6	0 5
Cinchonidine, Sulphate ..	"	0 8	0 7
" ..	Italian and German	0 7	0 5
Cinchonamine, Sulphate ..	British	25 0	—

The following estimate of the world's production of quinine in 1885 emanates from what is described as "a most reliable quarter" in this city:—

	Lbs.
United States ..	70,000
Germany ..	70,000
England ..	50,000
France ..	40,000
Italy ..	30,000
India (febrifuge) ..	10,000
Total lbs. ..	270,000

TAMARINDS.—Eighty-six packages all bought in.

TARTAR.—Four barrels brown Malaga sold at 5*l.* 5*s.* per cwt.

VANILLOES.—In the sales held immediately after the issue of our last report the article showed a decided improvement, nearly the whole of 220 tins offered being sold at rather better prices; and in to-day's sale this was continued, 178 tins being nearly all sold at about 2*s.* advance.

VERMILION meets with little or no demand; 35 boxes all bought in.

WAX.—*Bees*.—One hundred and sixty-five parcels of all descriptions were offered; of these a few sold at 6*l.* 5*s.* to 6*l.* 17*s.* 6*d.* for Jamaica, and 7*l.* for Calcutta. *Vegetable, Japan*, has further declined in value, sales having been made last week at 57*s.* to 60*s.* for slightly off in colour to fair whitish squares; 201 cases in sale to-day all bought in.

YLANG-YLANG.—Thirty-five bottles bought in.

ZEDOARY ROOT.—Twenty-three bags bought in at 4*s.* 6*d.* per cwt.

The following were the Stocks in the Port of London on February 28 last, with those for the corresponding date of the previous year:—

	1886	1885		1886	1885
Aloes	3,953	3,193	Gum (<i>cont.</i>)—		
"	20	34	Dammar .. pkgs	1,578	1,296
"	132	198	"	3,582	3,421
Aniseed, Star chta	296	207	Galbanum .. "	10	27
Arrowroot	12,757	10,654	Gamboge .. "	100	269
" bxs & tins	3,130	4,914	Gualacum .. "	35	87
Balsam	498	620	Kino	145	172
Bark, Medicinal			Kowrie	2,119	1,174
cks & cs	6,114	2,957	Mastic	115	251
srns, &c.	59,222	76,564	Myrrh, E.I. "	236	137
"	626	525	Olibanum .. "	5,337	5,025
Borax			Sandarac .. "	1,491	1,138
Bees' wax			"	799	1,514
"	1,048	823	Indigo, E.I. .. chta	14,524	14,032
"	1,023	637	"	4,923	6,063
"	105	6	Ipecacac .. cks & bgs	137	117
Wax, Jap. vgtbl. pk	2,135	903	Jalap	160	232
Campbor	7,515	9,122	Nux Vomica .. pkgs	613	1,326
Cardamoms	1,052	712	Oil—		
Cochineal, srns, &c.	8,694	10,179	Castor	596	480
Coc. Ind. bgs, &c.	334	406	"	8,462	5,540
Colombo root	807	1,590	Palm	223	64
Cream tartar	20	55	Cocoanut	2,088	3,815
Cubebs	17	265	Olive	1,267	475
Dragon's blood chta	139	149	Aniseed	299	336
Galls, China & Jap.			Cassia	230	113
cs	3,174	1,565	Opium	2,045	2,334
E.I.			Rhubarb	1,954	943
Trky & Prsn sks	2,316	2,863	Salpêtre, Nit. Pot.		
Gum—			"	1,936	3,171
Ammoniac	127	201	Nitrate Soda	7,233	2,915
Animi & Copal			Sarsaparilla	546	408
pkgs	7,210	8,913	Senna	597	2,365
Arabic, all des-			Shellac, total chta	60,392	47,172
criptions	16,731	5,989	Turmeric	984	678
Asafetida ..	794	379	Vermilion, chta &c.	40	6

POPULAR PERFUMES.

(Continued.)

THE subjoined formulæ have been supplied to us by a manufacturer who is not now in business, but who states that when sold they gave general satisfaction:—

1. GARDENIA.

Extract jasmine ..	20 oz.	Extract civet ..	1 oz.
" tuberosa ..	55 "	Ol. Ylang ylang ..	30 minims
" cassie ..	5 "	" neroli ..	40 "
" musk ..	2½ "	" French geranium ..	60 "
" storax ..	2½ "	Otto rose ..	30 "

2. NARCISSUS.

Otto rose ..	10 minims	Extract violet ..	10 oz.
Extract tuberosa ..	60 oz.	" storax ..	5 "
" jonquille ..	40 "	" musk ..	1 "

3. ROYAL HUNT BOUQUET.

Rose triple ..	10 oz.	Extract civet ..	1½ oz.
Extract rose ..	10 "	" mu-k ..	½ "
" cassie ..	7 "	" tonquin ..	7 "
" neroli ..	5 "	Ol. citron ..	60 minims
" orange ..	7 "	Ess. lemon ..	60 "
" orris ..	6 "		

4. MOUSSELINE BOUQUET.

Extract maréchale ..	20 oz.	Extract tuberosa ..	10 oz.
" cassie ..	10 "	" rose ..	20 "
" jasmine ..	10 "	Ol. santal ..	45 minims

5. EXTRACT FLOWERS.

Extract rose ..	20 oz.	Extract musk ..	½ oz.
" tuberosa ..	20 "	Ess. bergamotte ..	¾ "
" violet ..	20 "	" lemon ..	¼ "
" storax ..	1½ "	Ol. citron ..	33 minims

6. BOUQUET DES FLEURS.

	Oz.		Oz.
Extract jasmine ..	20	Extract orris ..	20
" rose ..	20	" orange ..	10
" violet ..	20	" musk ..	4
" tuberosa ..	20	Ol. French geranium ..	¼

7. LIME-TREE BLOSSOM BOUQUET.

S.V.R. ..	40 oz.	Extract orris ..	10 oz.
Ol. lign aloec ..	½ "	" musk ..	3 "
Extract rose ..	10 "	Rose triple ..	10 "
" jasmine ..	10 "	Ess. lemon ..	30 minims

8. LEAP-YEAR BOUQUET.

	Oz.		Oz.
Extract tuberosa ..	20	Extract patchouly ..	10
" jasmine ..	20	" verberna ..	2
" rose ..	16	" civet ..	2
" santal ..	10	Rose triple ..	6

9. BOUQUET DU ROI.

Extract jasmine ..	20 oz.	Extract musk ..	2 oz.
" violet ..	20 "	" ambergris ..	½ "
" rose ..	20 "	Ess. bergamotte ..	60 minims
" vanilla ..	8 "	Ol. cloves ..	60 "
" vitivert ..	5 "	Otto rose ..	50 "

10. BOUQUET D'AMOUR.

	Oz.		Oz.
Rose triple ..	10	Extract jasmine ..	20
Extract rose ..	20	" civet ..	3
" violet ..	20	" musk ..	3
" cassie ..	20	" ambergris ..	1

11. COURT BOUQUET.

Extract rose ..	30 oz.	Extract ambergris ..	1 oz.
" violet ..	20 "	Rose triple ..	13 "
" jasmine ..	20 "	Ess. bergamotte ..	½ "
" tuberosa ..	10 "	" lemon ..	¼ "
" cassie ..	8 "	Ol. citron ..	¼ "
" musk ..	2 "	" neroli ..	60 minims
" civet ..	1 "		



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

The North British Branch of the Pharmaceutical Society.

To the Chemist and Druggist—

SIR,—We are certainly indebted to you for the digest of the Privy Council's communication which you gave us in your last. It completely verifies our anticipations. Firstly, the curriculum is gone. To those of us who approved of the principle of a curriculum of study it is somewhat disappointing, but, on the whole, I am sure there will be a sense of relief, and that, too, not entirely outside the Council. The fact is it was overdue. There was a general feeling that such a movement should have begun with a minimum, instead of such an elaborate scheme, which was quite beyond the requirements of the case. With regard to the other part of the proposed alterations there can be nothing but entire satisfaction. The innovation was in itself, as pointed out at the time, unconstitutional and possibly mischievous, and the mode of procedure was reprehensible in the highest degree. Let us rejoice that the move has been checkmated. My object in writing you now is to note the position of the North British branch in the new circumstances. The Council has wiped us out, and they are prevented from putting the body they intended in our place. They were defeated in their attempt to impose a curriculum because it was in the teeth of the statute. Why was not that ascertained before? It seems plain enough now. In like manner why were not the legal bearings of the committee clause ascertained before, or at least the legality of the proceedings in trying to foist it on us? But, taking the case as it stands now, here are we, as I said, wiped out, and in our place a subordinate official put in, without our knowledge or consent. Sir, it may be the best plan. Apparently the President thinks it is, for it will be recollected that his first proposal was that there should be an association of Scottish pharmacists outside the Society, who might have the use of the house here by application to the Council (how gracious!); but I venture to think it will hardly be the judgment of Scottish or of English pharmacists either. On the one hand we had a body of twenty-one men, elected by all the members and associates in business in Scotland; and, on the other, we have a subordinate official, under no instructions or supervision, and responsible to nobody nearer than London. The present Council declare in favour of it, but I have a shrewd suspicion that former Councils and revered fathers on both sides of the Tweed had a very different idea on the subject; that they realised the immense advantage to the Society of having such a body as the North British branch to manage matters in Scotland, but that, seeing the impossibility of having a legal standing for such a body, they were only too pleased to have us act at our own hand. How else explain the continuance of our existence all these years? On any other supposition it seems to me the first proceeding ought to be to pass a vote of censure on all former Presidents and Councils. Or shall we put it in this way:—In the infancy of the Society it had a very small following in Scotland, and the Council were pleased to have a body here to advance its interests and influence, and now, when it has succeeded in doing so to some considerable extent, the Council think they can do without it, and proceed

to discard it. We are told the object of this recent action is to put the Society in touch with all parts of Scotland. This has been peculiarly the part which our branch has played. Let the new régime have free scope, and it will very soon be found how true this is, and how severely left alone the Society will become in Scotland.

I am, &c.,
"SCOTUS."

The Pharmacy Act and its Guardians.

To the Chemist and Druggist—

SIR,—Some few years since I wrote the registrar of the Pharmaceutical Society respecting the illegal sale of drugs, &c., by shopkeepers, &c., in this village, furnishing, by request, a list of names and addresses, together with a complete list of the purchases I had made. Amongst them were:—Laudanum, paregoric, Godfrey's cordial, cough mixtures (varied), chlorodyne, syrup of poppies, &c., each and every one without a label. Now, sir, I do think this kind of trading should be stopped. It is a very serious injustice to the *bonâ-fide* trade, and, moreover, what is the use of the Act if this is allowed to go on unnoticed?

Who are the authorities to interfere, as nothing more than writing them, enclosing a copy of the Act, was done by the Pharmaceutical Society? By inserting this in your next you will greatly oblige,
POOR CHEMIST.

71/114. *H. C. P.*—A Deaf Dog.—A customer has a very valuable spaniel, about four years old, which has been deaf since it had the distemper some years since. The dog cannot hear its master's voice, but it can hear a gun if fired close to it. Will the use of a syringe prove good, or can you recommend any other plan?

Deafness is often caused by accumulated dirt, or too abundant secretion of wax, mixed with road-dust, &c. In such a case syringing with warm water, to which a little glycerine has been added (5j. to ʒiv.) will have the most surprising effect, but great care must be taken to dry the ear by means of cotton wool gently conducted round the convolutions with forceps or an ivory penholder. We fear, however, that the case you refer to is one of paralysis of the auditory nerves brought about by degeneration of tissue consequent upon distemper. There is no remedy if paralysis is the cause.

118/34. *Ebor.*—Printing-press for Chemists.—Write to the Birmingham Machinists' Company, Birmingham, for lists, &c.

Doctors and Chemists.

To the Chemist and Druggist—

SIR,—In your last issue there appears a report of an inquiry regarding the death of a young man lately residing at Battersea. From the report it seems that the deceased had gone to a local chemist for a simple mixture for a slight ailment. He got a draught from the chemist which he took, and (it was supposed) died from. The chemist swore that what he gave the deceased was an aperient draught, but Dr. Stevenson testified that the deceased had died from a narcotic poison. The result was a verdict of "Manslaughter" against the chemist. This, so far, disposes of the chemist's case. Now, another: On the evening of February 23 an inquiry was held at Camberwell relative to the death of two women, whose deaths were alleged to have been caused by a mistake made in dispensing some medicine. The medicine was obtained from a dispensary, it being received from the doctor's assistant—himself a medical man. The result of the post-mortem examination was that death was found to be due to poisoning by strychnine. At the inquest a verdict was brought in accordingly, and the jury requested the coroner to censure the doctor for his carelessness. Now I wish to draw attention to the cases as they stand. In the one a chemist, on the barest evidence, is committed for trial on a charge of manslaughter. In the other a doctor admits that he had been instrumental in poisoning two women, and he is censured for his carelessness. Why, I ask, should there be one law for chemists and another for doctors? and why should the former be treated with such severity and the

latter with such leniency? This is a matter which requires careful inquiry, because this is not the first time that such legal inconsistency has occurred.

E. T. HARLEY.

[The matter to which this letter refers will have to be looked into by the proper authorities, and without reviewing the evidence in both cases, we venture to coincide with our correspondent's view. It is certainly remarkable that the medical man should be allowed to go "scot free."—ED. CHEMIST AND DRUGGIST.]

116/29. *Perfect*.—Exhibitions are to be held this year in Liverpool and Edinburgh. You should address the secretaries as to cost, &c. A charge is made for space at the rate of so much per square foot, and you have to keep an attendant to take charge, but several exhibitors often club together for this purpose. Awards are made by specially-appointed jurors, who experiment, if that can be done.

Re-arrangement of Patent-medicine Stamps.

To the Chemist and Druggist.

SIR,—May I be permitted to say a few words on the above subject in approval of Mr. Hodgson's suggestions in your valuable journal of February 15? I would further suggest that some chemist in each of the principal centres should take the matter up, and get the memorial to the Commissioners of Inland Revenue stamps signed by the patent-medicine proprietors, &c., in his locality, and the whole collected and presented by a committee for that purpose. I for one would undertake to get a memorial signed in my own locality, and also think that, if other patent-medicine proprietors in other localities would do the same, there would be very little doubt as to the result being satisfactory. But it should not be overlooked or omitted in the memorial the advisability of all patent-medicine stamps being gummed and punctured ready for use, the same as postage and other stamps. This to large consumers would prove an inestimable boon, as it would save much time and labour, and is, to my way of thinking, alone worth all the trouble of presenting a memorial to the Commissioners, even if no rearrangement of stamps be contemplated. It is to be hoped that this matter will not be allowed to sink into oblivion like so many other schemes.

Yours faithfully,

February 26.

H. E. DE CARLE.

[The suggestion is that the Board of Inland Revenue should be asked to issue patent-medicine stamps of the value of one halfpenny for 6d. articles, one penny for 1s. articles, and three halfpence for 1s. 6d. articles, leaving the higher-priced ones as they now stand; and that, besides, medicine stamps might be furnished on sheets perforated and ready gummed. If a sufficiently large number of chemists interested will in the next week or two express their opinions very briefly on these points, it may be possible to prepare a memorial to the Board; or the Trade Association may take up the question, and no one could so efficiently put it through as they.]

The Patent-medicine Stamp.

To the Chemist and Druggist.

SIR,—In reference to reducing the patent-medicine stamp we would, I think, find the change affect us as a trade more than we have the alteration in the cost of the licence from 2l. to 5s. It is a pity the trade does not agitate to return to the 2l. licence (however, "humble pie," &c.). We should not have so much competition to contend with.

Yours truly,

LET WELL ALONE. (110/71.)

59/110. *II. II.*—We cannot say whether the Board of Inland Revenue would require your corn and wart destroyer to be stamped. The only way to get a satisfactory answer is to put up a bottle just as you intend to sell it, send it to the Board at Somerset House, and ask.

The Attempted Registration of the Title "Peptonising Powder."

To the Chemist and Druggist.

SIR,—A letter appeared in your last issue on the action taken by this Association in reference to the trade-mark "Peptonising Powder," which may, I fear, have a tendency to lead some of your readers a little astray.

Your correspondents asserted that they had seen statements in *THE CHEMIST AND DRUGGIST* and elsewhere indicating that, owing to the action of the Association, "the attempt to register, and thus obtain a monopoly, in such common words as 'Peptonising Powder,' was defeated," adding that our action in the matter really "resulted in nothing." Permit me, therefore, to supplement that letter with the following additional particulars.

On August 24 last I wrote to the Registrar of Trade-marks intimating to him that, in the opinion of my Executive Committee, applicants for certain marks advertised in *Trade-marks Journal*, No. 382, should be called upon to file disclaimers to any right to the exclusive use of certain words forming part of those proposed marks, amongst others being the words "Peptonising Powder." The Registrar, replying to my letter on the 26th day of the same month, stated that disclaimers would be asked for in the case of the "Peptonising Powder" marks. As the Registrar has power under the Trade-marks Acts to prevent the registration of any mark until such disclaimer has been filed, and as he considered a disclaimer necessary in the case in question, and called upon applicants to disclaim, the Association inferred, and, with all respect to your correspondents, I should submit, rightly inferred, that the Registrar would refuse to proceed to register until after his request had been complied with.

I am, sir, yours faithfully,

W. F. HAYDON,

Secretary to the Chemists and Druggists' Trade Association of Great Britain.

Office of the Association, 23 Burlington Chambers,
New Street, Birmingham, March 1.

Comments on Recent C. & D. Articles.

To the Chemist and Druggist.

SIR,—I have tried the formula for sp. am. arom., by Mr. J. R. Hill, in your January number, and find the process quite a success, with this exception, that a very small part of the amm. carb. comes out of solution when added to the aromatised spirit. The product, as regards flavour and appearance, is quite equal to that produced by distillation. Spec. grav., at 60° Fahr., .896. Could you give me the specific gravity of am. carb.? I am desirous of making a sp. am. ar. of spec. grav. .920, and could then make a preliminary calculation of the amounts of spirit and water required.

Liq. bismuthi, also made according to the formula given by Mr. P. MacEwan, is all that could be desired, and the process is very simple.

No doubt your attention has already been called to the criticism of Mr. S. L. Lawrence's plan for making tr. camph. co., and the quantity of tr. opii to be used in making a pint of tr. camph. co., by Mr. Dunlop. The latter gentleman's suggestion that 3iss. of tr. opii be used to the pint is based upon the assumption that gum opii in its moist state has been used for preparing the tincture. P. B. directs that powdered opium be used. Hence the quantity of tincture to be used per pint should be 3ix. m̄xl., as already stated by Mr. Lawrence, or, to be still nearer the right quantity, 3ix. m̄xl.

A ready method of making liq. amm. acet. fort. (1 to 5) is by saturating acetic acid, P.B., with liq. amm. fortiss. About 10 of the former require 3½ of the latter.

Should you think that these few remarks will encourage any others of our *confrères* to try the above formulæ, shall be glad if you would publish them in your correspondence. I am pleased to be able to add my feeble testimony to the great good your journal does, as an educational work, among us, the younger members of the trade.

I am, yours faithfully,

March 2.

E. F. YOUNG.

Tinctura Camphoræ Composita.*To the Chemist and Druggist—*

SIR,—In your issue of this month Mr. J. Dunlop, of Hull, draws attention to my suggested formula for tinct. camph. co., which appeared in your issue of last month.

He states, "the quantity of tincture of opium ought to be altered, inasmuch as powdered opium is stronger than the gum." Reference to the British Pharmacopœia, 1885, will show that tincture of opium is ordered to be prepared from opium in powder, and therefore my calculation, being based on this, is perfectly correct.

Faithfully yours,

Oban, February 22, 1886.

SAMUEL LAWRENCE.

A Plea for Percolation.*To the Chemist and Druggist—*

SIR,—In the report of the meeting of the Liverpool Chemists' Association, contained in this month's CHEMIST AND DRUGGIST, I observe Mr. Abraham wound up an interesting paper by condemning the excessive "fashionable rage" for percolation as a means of exhausting drugs, and "Dr. Symes agreed with Mr. Abraham with regard to percolation."

It must have been instructive to those present to have heard opinions from such eminent authorities upon this process, for which there is such a "fashionable rage," and I confess to a feeling of regret that the reasons given for its condemnation do not appear in the report.

I have prepared tinctures on the small scale, that is, from one to eight pints, by percolation for at least twenty-five years, and I am so firmly convinced of its superiority to the process by maceration that I never think of preparing a tincture by the latter process when it can be done by the former.

I was finishing a four-pint quantity of tinct. gent. co. at the time I read the report, and I send you specimens obtained in the ordinary course, and not prepared expressly for the occasion. What is your opinion of them?

I forward a specimen of marc, after being pressed in the usual manner, a small quantity of the liquid expressed from the marc, and some of the tincture itself, and will be pleased to learn your opinion of them.

Yours, &c.,

R. BRODIE.

[Many, no doubt, can corroborate Mr. Brodie's experience. To appreciate fully the advantages of percolation, it must be carried out thoroughly, and for a number of years, before opinion is formed. Mr. Brodie is entitled to speak on the subject. The marc which he sends is an exhausted coarse powder, quite destitute of the characteristics of the drugs composing it; the expressed liquor is straw-coloured and feebly bitter, and the finished tincture is rich in colour, aroma, and taste. There is no difficulty for anyone to obtain similar results by percolation with ordinary care, but it is next to impossible to exhaust perfectly by maceration.]

17/111. J. W. recommends "Qu'erist" (97/71), who wants the name of maker of pills, to try Bird & Sons, Birmingham, or John Bell, Sons & Co., Liverpool. One or the other makes the pills he wants.

J. W. says the best books "C. E. L." can use for diseases of children are Cassell's "Family Physician" and Chavasse's "Advice to a Mother."

Fluid Magnesia.—We tried all the usual methods, but could never keep it right until we had it supplied in soda-water syphons; in this way it remains good to the last ounce. Several leading manufacturers supply it in syphons, and they are most convenient for use.—J. F.

A Subscriber's Opinion.*To the Chemist and Druggist—*

SIR,—I cannot allow the present time to elapse without adding to your very numerous testimonials. I have now been subscribing to your journal for the past three years, and, although you make a very nominal charge yearly to cover

postage, &c., I consider you are virtually making the chemists of the United Kingdom a present of it. There is one fact which speaks for itself. You inserted last year a recipe which I immediately put into stock, and that recipe has more than paid my subscription to THE CHEMIST AND DRUGGIST for years to come. I am glad you are bringing your journal more and more before us in sending weekly copies. I think it will be a splendid success. Wishing you all sorts of good luck in the new undertaking,

I remain, sir, yours faithfully,

G. LANE McCORMACK, M.P.S.I.

2/231. **The Exchange Column.**—J. T. R. writes:—Since the Exchange Column was introduced I have made several excellent bargains, as well as disposed of a lot of surplus stock. My advertisement in Exchange Column last month, which cost me 10d., has made me quite 10l. profit.

T. R. T.—**Bones for Anatomical Study** are prepared by prolonged boiling with milk of lime until, on drying, they are white and free from grease. Millikin & Lawley, 165 Strand, W.C., may supply you with a set ready.

The Infamous and Disgusting Article.

Mr. G. Ellinor writes to us from Sheffield (February 16, 1886) as follows, in reply to our mention of and comments on a speech of his in our last issue:—

"I have read your article, and also your correspondent's notes, and had your correspondent been careful to send you the truth and nothing but the truth your article would no doubt have taken another vein. Now, sir, allow me to ask you in what is any member of the Trades Committee and myself particularly dishonest? If you can sustain such a charge you will be justified in publishing your article of February 15. Wine, distance, or motive must have prevented your correspondent hearing correctly my remarks, which were:—'To state or infer the committee were dishonest as a member, I thought it infamous and disgusting as it was the principle I contended for.' I judge your correspondent knows something of Sheffield. I would ask him, on the same standpoint of reasoning used by you (and also your correspondent), should Sir Hy. Bessemer attempt to register the words 'Bessemer Steel' somebody in and out of Sheffield would object. Should the Cutlers' Company object, and Sir Henry cried with a loud voice 'The Cutlers' Company are preventing me registering my own name,' would or should be sufficient to secure to Sir Henry the whole and sole right to the use of the words 'Bessemer Steel'? I have yet to learn Mr. Ellinor is not truthful, polite, or honest, and Mr. Ellinor objects to be made a scapegoat, Mr. Ellinor not being that 'one man.' Had your correspondent correctly reported the whole of my speech, it would have benefited the whole trade."

West-end Trade.—The extracts below are from a letter written by the proprietor of a business in the West-end of London.

I have been in this Street 25 years for the first 10 all was prosperous full prices, plenty of customers both cash and credit as sure as I opened my shop every morning so sure at night I had 3 and 4 and more in my till at night; well the stores got established then one family after another left me, then their servants got their Scotts and Cockles pills there for 9½d., then the coachman in the Mews began to get his Pills and condys there and his Wife her Steedmans; this was all got thro' their Masters Ticket at the same time as the Butler or Housekeeper got the Masters there, well from doing 20 to 30l. a week the takings are not much over a 1l. or 30s. a day, then came another Blow the Cutting Grocers sold all the patents at exact cost price Cockles 8½d. citrate magnesia handbills sent round to all the door 10d. a lb. 2 oz. for 1½d. camphor 1d. oz. borax and carb soda 6d. a lb. leaving the Poor Chemist no profit, then came another Blow a London MP chemist is buying the Poor Broken down open doctors Shop in each Street and cutting us further down in price of all mixtures down to 9d. a bottle pills 3d. and 4d. a dozen, they dont seem to care about the Gentleman being in

the profession but they make it a Grocers profit giving away their Responsibility and skill all for nothing besides the dreadful long hours 8 A.M. to 10 P.M. and foolishly working on a Sunday which I have never once opened my shop on the sabbath yet, but every chemist does, he only gets old Prescriptions to make up and very rarely a new one and what do the public care for your philanthry not a Farthing, you never hear of a chemist retiring only thro' having perhaps some money left him; well I have just had a little left me by my Old Uncle in the north and so I shall sell my Business this summer and put the two monies together go and live in the country on a little, let someone else have a try I am tired of it; when the upper 10 have ruined all the Middle class and have to lower their rents to half they will find after all they have not been gainers by deserting us.

Pepsine in Prescriptions.

To the Chemist and Druggist—

SIR,—I shall be glad to have your opinion, or the opinion of your readers, on the two questions that follow relative to this prescription:—

Pepsin	..	..	..	..	..	..	..	3ij.
Acid hydroch. dil.	..	..	..	..	..	..	..	3iij.
Glycerini	..	..	..	..	..	..	..	3j.
Aq. ad.	..	..	..	..	..	..	..	5vj.

Sig. A tablespoonful after each meal.

1. What brand of pepsine ought to be dispensed—Bullock's, Morson's, or "B.P."?

2. The prescription had previously been dispensed by a Metropolitan firm, and from the price mark (5s. 8d.), Bullock's pepsin had evidently been given. What ought I to do, more especially since the patient informs me that the medicine is to be continued for a month? Ought I to go on giving Bullock's and charging 5s. 8d., or make some explanation?

I may say that my customer is in moderately good circumstances, but at the same time few people care to pay 6d. a dose for their medicine, especially when that has to go on for a long time.

Your advice will be esteemed by

A COUNTRY SUBSCRIBER.

112/45. *Dark Blue.*—**Herb Beer.**—We gave directions in January, 1885, page 62.

28/228. *Nero.*—We published formulæ for **Aniline Marking Ink** in our 1884 volume, page 195, and would be glad if any of our readers who have tried them would communicate their results for the benefit of others.

Gold Paint.—The gold powder you may get from Pavitt & Sons, 70 Southampton Row, W.C.; the liquid portion is merely a weak spirit varnish.

222/22. *Chemicus.*—**Dentistry Books.**—Tome's "Dental Surgery" (Churchill), or Hunter's "Mechanical Dentistry," Crosby Lockwood & Co.

Wanted a formula for **Pasma Powder.**

95/23. *C. W. P.*—Sulpho-carbolates of lime and magnesia are administered in same doses as sodium sulpho-carbolate, viz., 5 to 20 grains.

112/6. *W. T. C.*—**Allcock's Indiarubber Plasters.**—Made by melting caoutchouc with several resins, olibanum, myrrh, gum thus, &c., by aid of turpentine and heat.

116/1. *M. Crichton.*—**Malted Food for Infants.**—For this the simplest way is the best, and that is to bake 10 parts of wheat flour and 1 of sifted malt into biscuits; then grind the biscuits to powder. We do not know any book exclusively devoted to this subject. Speak to an intelligent baker about the matter.

114/64. *Subscriber* wishes a recipe for **Liquor Pepsin**, containing glycerine and hydrocyanic acid. The following is a good one:—

Pepsin porci	..	..	..	..	..	..	..	5iij.
Acid. hydrochlor. dil.	..	..	..	..	..	..	..	5iij.
" hydrocyanic dil.	..	..	..	..	..	..	..	3ss.
Glycerini	..	..	..	..	..	..	..	3iv.
Spt. rectificat.	..	..	..	..	..	..	..	3ij.
Aqua	..	..	..	..	..	..	..	q. s.

Digest the pepsin for a week in the hydrochloric acid and glycerine, diluted with 12½ oz. of water; add the spirit, and water to a pint; shake well, then allow to settle, and syphon off as much as possible to save filtering, which is slow; add 12 minims of dilute hydrocyanic acid to each ounce and keep in a cool place when finished.

46/114. *J. W.*—We are obliged for your congratulations. A "chess column" in *THE CHEMIST AND DRUGGIST* is a tempting suggestion, but we fear it would be too far away from our purposes to be admissible.

4/115. *A. P. S.*—Printers may, no doubt, charge for proofs of labels if no order results, and if their customers have ordered them to prepare such proofs. They may, too, "demand" any sum they think fit, but a County Court Judge would not allow a claim which a defendant could prove was extortionate.

Dispensing Difficulties.—What is the best way of dispensing the following?

Ext. belladonnæ	..	..	..	..	..	gr. v.
Potassii bromid.	..	..	..	..	..	gr. x.
Ol. theobrom.	..	..	..	..	..	q. s.
Fiat suppos.	Mitte vj.					

Powder the bromide as finely as possible, and place it on a tile; rub down the extract on the tile with 3 to 5 drops of water. Melt 50 grains of cocoa butter and 5 of white wax over a water-bath, and rub up more than one-half of it with the contents of the tile. Then transfer to the dish containing the rest of the basis, mix expertly, slightly heating if necessary, and pour into the mould.

Potass. tart.	..	..	..	..	..	3iss.
Potas. bicarbon.	..	..	..	..	..	gr. xlv.
Acid. citric.	..	..	..	..	..	3iss.
Tr. cardam. co.	..	..	..	..	..	3ij.
Spt. chloroformi	..	..	..	..	..	3j.
Aquæ, ad..	..	..	..	..	..	3iv.

M. ft. mist 5j. subinde.

Dissolve the bicarbonate in ½ oz. of water, add the acid; dissolve the tartrate in another ½ oz., mix the solutions, and finish off the mixture in any way.

230/32. *T. E. P.*—The teething powders are hygroscopic, owing to the sugar which they contain; for another reason you should omit the sugar, that reason is, that on long keeping the calomel is partly converted into perchloride of mercury. Use, rather, a little powdered milk sugar.

Cleansing Drench.

Nitre	..	..	..	..	..	..	..	Oz.
Sublimed sulphur	..	..	..	..	..	..	..	1
Ginger	..	..	..	..	..	..	..	1
Fenugreek	..	..	..	..	..	..	..	½
Gerstian	..	..	..	..	..	..	..	½
Sodium sulphate	..	..	..	..	..	..	..	4
Magnesia sulphate	..	..	..	..	..	..	..	4

Mix. Give one-half of this in at least two quarts of warm gruel.

116/58. *J. W. W.*—**The Minor.**—We are alive to your suggestion; meanwhile, write out from your B.P. note-books of its chemistry, materia medica, and pharmacy. Do everything methodically, and have a certain part of each day rigidly reserved for study.

229/19. *L. Bran* (Dieppe).—**Golden Hair-dye.**—A 10-per cent. solution of peroxide of hydrogen is successfully used: any wholesale house will supply.

112 647. *C. E. L.*—**Santonin Suppositories.**—Cocoa butter is the best basis. For children 2 grains, and for adults 5 grains, of finely-powdered santonin should be incorporated with 15 grains of the melted fat.

Mr. W. Provost, Grantham, sends us the following, and says the medicine had a good sale in Northampton when he lived there twenty-five years ago:—

Ol. juniperi	3iss.
.. terebinth	3iss.
Sp. vini rect.	3ij.
Tinct. opii	3ij.

M. Ten to twenty drops on sugar.

For lumbago and pains in the back.

110/66. *Barberie.*—**Shaving Cream.**—Take two cakes of a W. & G.'s white glycerine soap and cut down into shavings, which should be steeped in 6 oz. of water over night, then heated over a water-bath and stirred until uniform; while warm transfer to a warm mortar, and incorporate the following, previously melted together:—

White wax	Oz.
Spermaceti	1
Almond oil	4

Stir until a pearly appearance is acquired; a trace of aniline violet may be added to colour. The paste is usually perfumed with almonds. The desideratum is to have no free alkali, but free fat.

118 27. — *W. H. S. Son.*—**Erasmus Wilson's Hair Lotion:**—

Ol. amygdal. dulc.	3i.
Liq. ammon. fort.	3i.
Ext. rosmarini	3iv.
Aq. mellis	3ij.

M.

117 53. *Petular.*—**Extract Musk.**—Digest 1 drachm of musk in $\frac{1}{2}$ drachm of ammonia solution and an ounce of water for an hour, make up to a pint with s.v.r., and macerate for ten days at least before using.

Jujube cutters.

116 62. *J. W.*—Write to Wm. Bierley, confectioners' machinist, Rochdale, or H. Woodhill, Water Street Works, Birmingham, for catalogues.

118 38. *R. S. E.*—**Chrome Ink.**—The faintness or intensity of the writing depends upon the finish of the paper. Bicarbonate of soda should be used.

116/6. *Vestibular.*—**Blood Purifier.**—

Potassii iodidi	80 gr.
Potassii bicarbonatis	3ij.
Ext. glycyrrhizae liq.	3ss.
Dec. sarsae co. conc.	3ij.
Aque ad	3viij.

M. A tablespoonful of this thrice a day.

Syrup of Camphor.—Wanted, a formula for this. Can you tell us what it is like?

116/4. *W. Harrington.*—**Silver Marking ink.**—

Argentii nitrat.	3i.
Sodæ carbonat.	3iss.
Acid. tartaric.	3ij.
Liq. ammon. fort.	3ij. or q.s.
Archil	3iss.
Pulv. sacch. alb.	5vj.
Pulv. aacacie	5vj.
Aque	q.s.

Dissolve the silver and soda salts, each in 5 oz. of boiling-water, and mix. Collect on a filter and wash thoroughly. While still moist rub in a mortar with the tartaric acid, and, when effervescence has ceased, add the ammonia until solution is effected. Mix the powders with the archil, add the silver solution, and enough water to make 6 oz.

THE PATENT MEDICINE STAMP ACTS.

A MEETING of the wholesale and retail drug trade of London, called by the Chemists and Druggists' Trade Association, was held at the Inns of Court Hotel, yesterday (March 5), "to consider the present oppressive system of administering the Patent Medicine Stamp Acts, and to take such steps as may be deemed advisable to modify the same."

Mr. W. G. CROSS, president was in the chair, and the meeting numbered some seventy gentlemen.

The PRESIDENT, in the course of some opening remarks, referred to the proposal which had appeared in this journal to reduce the duty *pro rata*. Some reference was also made to the correspondence between Messrs. Newbery and the Board, which had been published in "our valuable trade journal," THE CHEMIST AND DRUGGIST.

The speaking that followed was lively. Mr. YOUNG had been fined 1*l*. for the use of a label which he had employed for 8 years and which had never before been objected to. He thought it was a disgrace to the country, that the so-called honourable Board of Inland Revenue should resort to the weapons of Fenian assassins and obtain evidence from the common informer. Why did not the Board employ inspectors to go round and explain to chemists wherein they were infringing the law? He moved a resolution intimating that some action was necessary. Mr. COOKE seconded. He, too, had been fined 1*l*., he believed unjustly, but he had sent the money rather than trouble to fight it, and the Board had never had the courtesy to acknowledge it. Mr. STAMP (Hampstead) thought the objectionable part of the law was that chemists may not put their names at the top of the labels without paying duty. Mr. WALES said he had challenged the Board to fight on this ground, but they had not dared to do so. The Board had demanded a fine from him for some Wales's Specific Capsules which he sold. They had tried to weary him out by correspondence, but he had replied to all their letters. He went to see the solicitor, and contended that the name at the top of the label did not absolutely prove a claim of proprietorship. Thompson's article might have been prepared by Smith. The solicitor saw some force in that contention, and said if he would write to the Board and promise to destroy his labels they would probably remit the fine. He offered to do so, but only with the proviso that he not admit their right. Then they said they would sue him in the Court of Queen's Bench, but he was not to be intimidated, and he challenged them to do so, but since April, 1884, he had heard no more of the matter. It would be idle to memorialise the Board. They should agitate for a reduction of the salaries of civil servants.

Mr. HAYDON (secretary) said that during the past ten years he had seen a number of labels on which the Board had claimed penalties, but he had never met with one case which in his opinion offered the chance of a sound defence. This statement elicited various instances, and in many cases labels were produced. Mr. T. WILLIAMS advocated that the stamp duty should be abolished, and the revenue recouped by a licence for the sale of compound medicines. He estimated that a licence of 8*l*. a year would bring in about as much as the present stamps, and be cheaper to collect. But, said Mr. DAVENPORT, that assumes that the same number as now pay 5*s*. would pay the 8*l*. Mr. LONG would have the licence limited to chemists, and he wanted to know why a brewer might say his stout was nourishing, while a chemist might not say that anything of his was nourishing without stamping it. Mr. READE wanted a deputation to the Chancellor of the Exchequer. Dr. EDWARD HORTON urged that the co-operation of the medical profession should be sought, but that suggestion met with very scant respect. Then Mr. G. WALKER moved that the subject be referred to the Executive Committee, and this proposal was pushed forward by the officials present and ultimately passed. Mr. WILLIAMS agreed with it, but asked if that was all they had come together for? He proposed that a defence fund should be raised, and this suggestion met with some verbal support, but nothing came of it.—Mr. HAMPSON, Mr. URWICK, and the PRESIDENT made some moderate speeches, but the majority present seemed somewhat dissatisfied with the tame conclusion arrived at.

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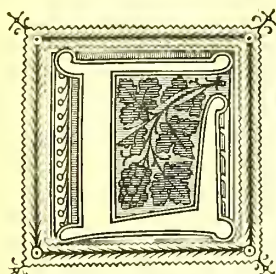
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CAUTION.—Observe that the Signature of the Inventor is on every label.

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Tabellæ Nitroglycerini, B.P. 1885 (Martindale).

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The Nitroglycerine is in a perfectly fixed solution in the Chocolate. The Tablets are not prepared with Alcoholic solution of Nitroglycerine. They weigh **ONLY 2½ grains** each, an ounce containing about **170 doses**. They are sold at the following **REDUCED** prices to the trade, subject:—

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" Trade	24s. and 48s. per doz.

FOR HOSPITALS AND DISPENSING:

In Bottles, Retail, 1-oz., 6s. 6d.; 2-oz., 10s.; 4-oz., 18s.; 8-oz., 27s.; and 16-oz., 48s. each.

 " Trade, " 60s.; " 96s.; " 156s.; " 264s.; " 480s. per doz.

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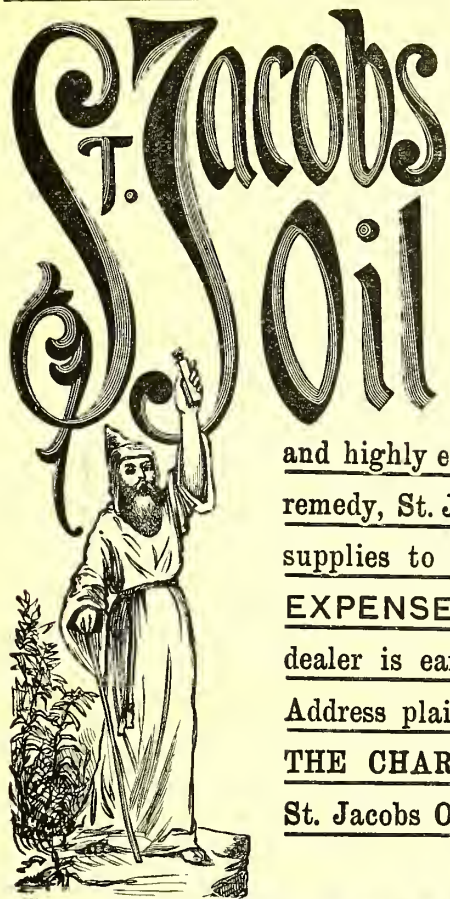
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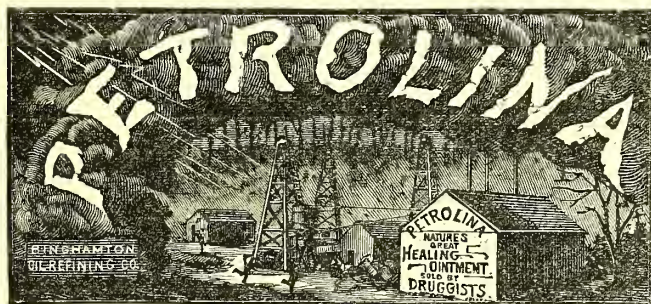
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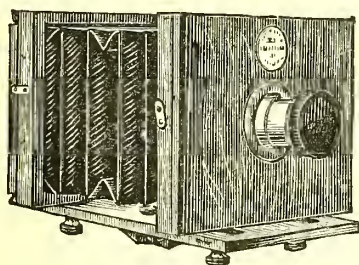
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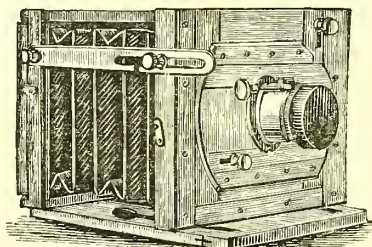
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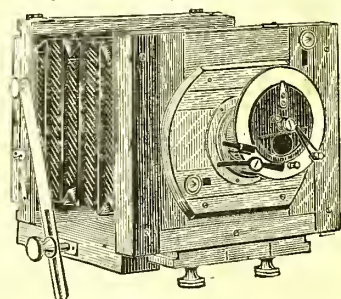


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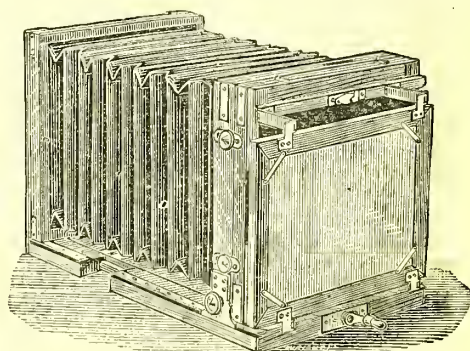
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The Instantograph ..	2	2	0	4	4	6	6	8	8	10	10
The Ladies' Camera...	1	15	0	3	0	4	5	5	10	7	0
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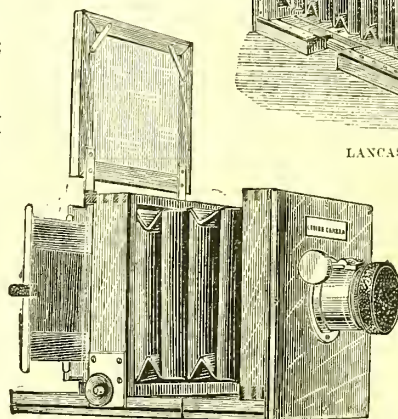
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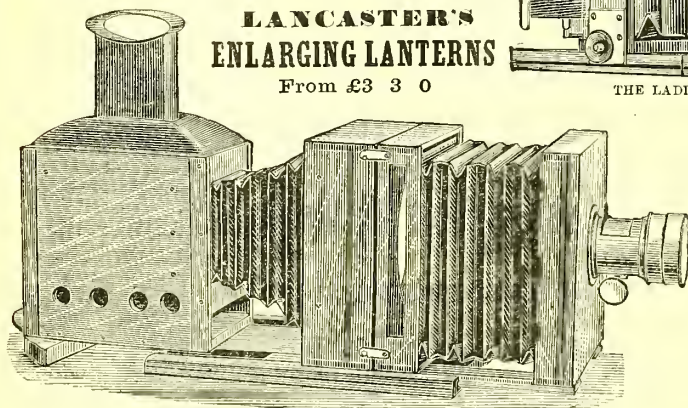
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The proportions of the various ingredients are carefully and judiciously calculated, so as to form an efficient aperient and alterative, as well as an agreeable and effervescent draught. ALSO

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A Bland, Odourless, and perfectly pure Hydro-Carbon Jelly of our own manufacture. Cheapest and best Hydro-Carbon.

ALSO

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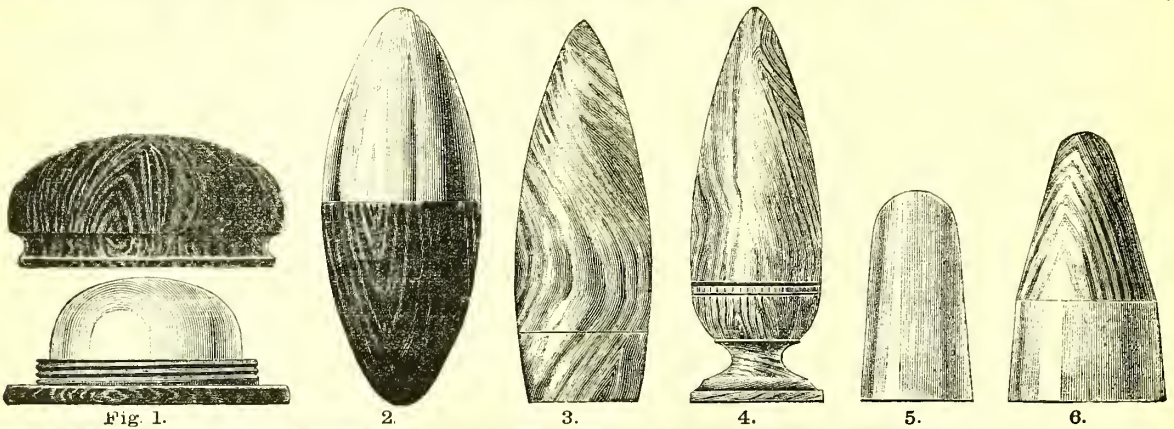
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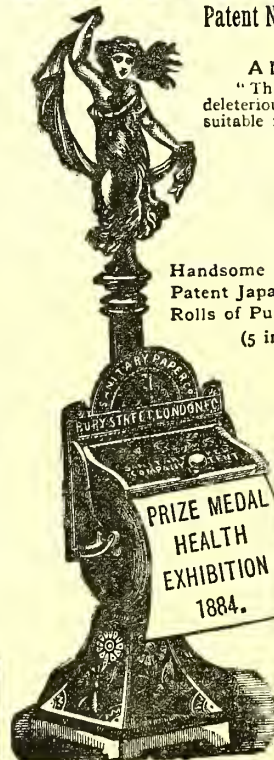
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3/8 per doz.-/6 Willow Wood,
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Pedestal Shape,
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6/3 per doz.

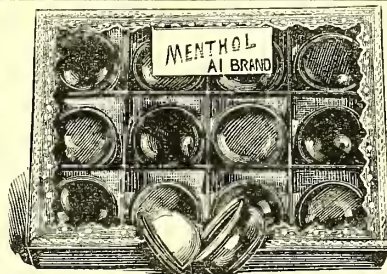
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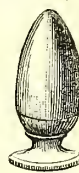
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Boxwood,
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GUARANTEED PURE JAPAN MENTHOL.
NO STAMP REQUIRED.

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-/6 and 1/- Box-
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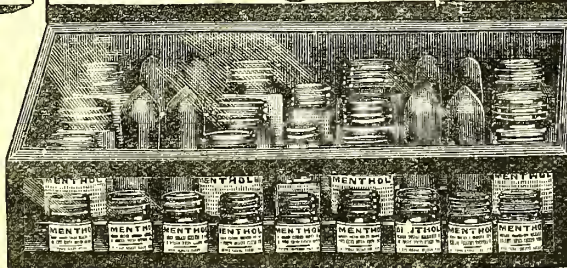
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6/9 per doz.ALL SHAPES SENT OUT
IN SHOW BOXES.Special Terms to Shippers
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-/6 Cardboard, pocketable, pretty,
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will be in great demand;
so have a show case, which
is bound to increase the
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post. In it you will find particulars of
Handsome Glass-fronted Show Case (as
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A1 BRAND MENTHOL
NEURALGIA!
IN VARIOUS SHAPES AND SIZES

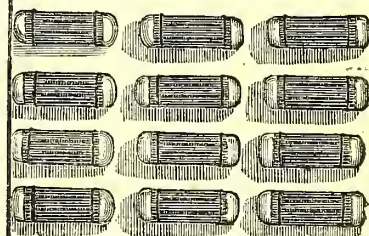


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6d. NEURALGIA & HEADACHE
PENCIL. 6d.

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The Show Case is 11 ins. long
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so that the Goods can be sold
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The largest assortment of Brushes kept in our London Warehouse, and a Showroom of several thousand different patterns.

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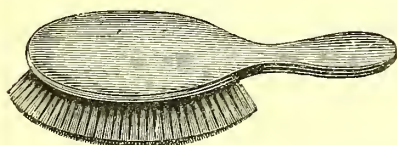
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Our terms are nett prompt cash, but Monthly Accounts can be arranged.

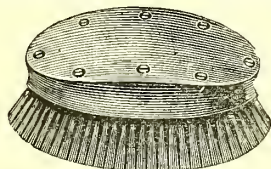
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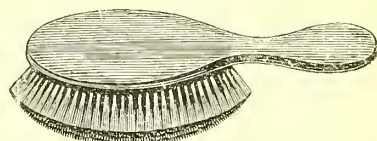
OVAL.



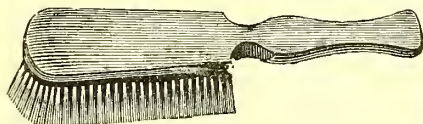
MILITARY HAIR BRUSHES.



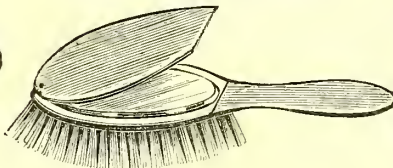
BROAD OVAL.



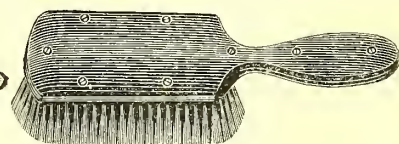
SKITTLE.



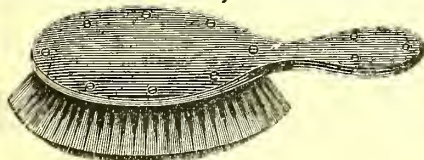
WITH MIRROR.



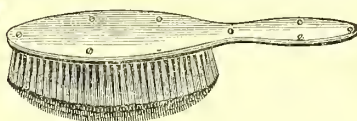
CHURCH DOOR PATTERN.



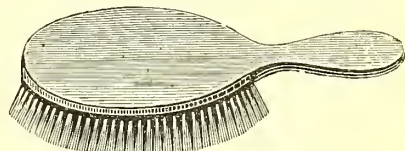
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LONG OVAL BALL CUT.



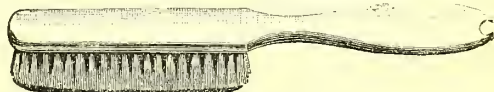
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IRON BOUND. EXTERIOR DIMENSIONS.

For MELTING GOLD, SILVER, COPPER, &c.

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Sizes F and K are also made with an extra large top door (b) to take a Morgan's Crucible No. 8 (F) and No. 20 (K).

No.	Diam. in.	Diam. milli.	Height in.	Hauteur milli.	For Morgan's Crucible	Price £ s. d.
A	9½	235	17½	445	No. 2	1 0 0
B	9½	248	20	508	" 4	1 5 0
C	11	280	22	551	" 6	1 10 0
D	13½	349	26	660	" 8	2 5 0
E	14½	369	28	712	" 12	3 0 0
F	18	457	32	813	" 16	4 0 0

Exterior dimensions.			Interior dimensions.			For Battersea Muffles	Price
Width and depth front to back	Largeur et profondeur	Width and depth front to back	Largeur et profondeur				
A .. 12½	318	9½	235	ABCD	£2 0 0		
B .. 13½	337	10	254	BCDE	2 5 0		
C .. 14½	369	11	280	CDEFH	2 10 0		
D .. 16½	394	12	305	DEFGH	3 0 0		
E .. 16½	414	13½	324	EFGH	3 10 0		
F .. 17½	445	13½	350	F GHJ	4 0 0		
K .. 23	585	19	483	KL	8 0 0		

MUFFLES.

With or without apertures.

No.	Long. in.	Wide. in.	High. in.	Price per doz.
A	7	3½	2½	12/
B	7½	4½	2½	15/
C	8	4½	3	18/
D	8½	5	3½	21/
E	9	5½	3½	24/
F	10	6	4	27/

Sizes A to F, also K, are suited for the Furnaces of the same letters. G to L have one slit at back only, none at sides. In addition to those priced above, Muffles are made of all shapes and sizes, suitable for Assayers, Enamellers, Dentists, &c.

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Diam. in.	Diam. milli.	Per doz.	Diam. in.	Diam. milli.	Per doz.
2½	064	1/3	4	102	1/9
3	077	1/6	5	127	2/

Larger sizes to order.

SCORIFIERS. (PER GROSS.)

Diam. in.	Diam. milli.	Price.	Diam. in.	Diam. milli.	Price.
1	026	3/	2½	064	5/
1½	032	3/6	3	070	6/
1½	038	4/	3	077	7/6
2	051	4/6	3½	089	9/
2½	057	4/6	4	102	10/6

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FOR COPPER.

CORNISH FORM AND QUALITY (JULEFF).

Nest of Two	High. in.	Hauteur in.	Diam. in.	Price per doz.
3½	083	3	077	2/ per doz.
2½	064	2	051	1/

Single.. .. 2 051 2½ 064 1/

All sizes and shapes to order.

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High. in.	Hauteur in.	Diam. in.	Price per doz.
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Covers, 2/ per doz.

FOR LEAD.

5 in. diam., 077 diam. milli, with Covers, 2/3 per doz. Other sizes to order.

FOR GOLD.

THESE ARE PERFECTLY SMOOTH AND OF THE CORRECT POROSITY.

No.	Diam. in.	Diam. milli.	Height in.	Hauteur in.	Per doz.
A	1½	027	1½	027	2/
B	1½	032	1½	032	2/
C	1½	038	1½	038	2/
D	1½	045	2	051	2/

Covers for either size, 6d. per doz.

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SIRS,—I have tested and used the Assay Crucibles and Annealing Cups, and can with assurance recommend their superior quality and durability.

Respectfully yours, &c,
O. D. MUNSON, Assayer.

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For several years past I have used Fire Clay Assay Furnaces, Muffles, and Crucibles made by the Patent Plumbago Crucible Co., Battersea Works, London, S.W., and am so thoroughly satisfied with them that I strongly recommend this manufacture to all laboratories, refiners, and smelting works.

(Signed) PAOF. DA. DÜRRER,
Der Königl. Rheinisch Westfälischen Polytechnischen Hochschule.

NOTICE.—Care should be taken in all instances, when ordering, to specify the Crucibles, &c., manufactured by

THE MORGAN CRUCIBLE CO. (Sole Manufacturers of Morgan's and Salamander Crucible), Battersea Works, LONDON, S.W.

Sole Manufacturers of JULEFF'S Cornish Crucibles for Copper, Tin, &c.

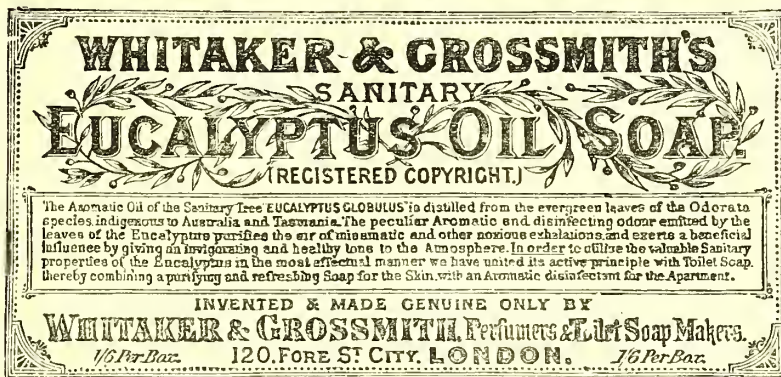
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THREE
TABLETS

IN A BOX.

12s.

PER DOZ. BOXES.



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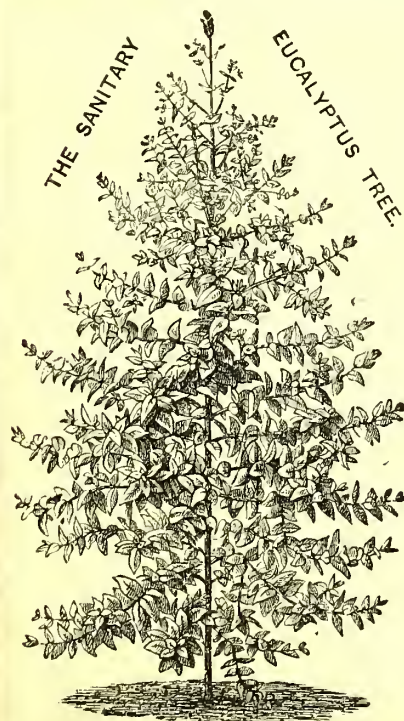
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Standard.

Doctor Bosisto says—"As a DISINFECTANT, DEODORANT, and ANTISEPTIC the wonderful properties of this Oil can scarce be fully stated; its present known value should give it a place in every household, being a *complete sanitary agent* for all purposes. It needs only a trial to convince the most sceptical. *The sweet and refreshing aroma* (although peculiar at first to some) supplies to the sick room an *exhilarating and purifying effect*."

The discoverer of the valuable properties of the *Eucalyptus* tree, Mr. JOSEPH BOSISTO, of Melbourne, has given much interesting information respecting its peculiar character and its products, and remarks that:—"The rapidity of its growth, its early maturity to a forest tree, together with the power to absorb considerable moisture and to permeate the air with its peculiar odour, led to the belief that this tree, attractive in itself, exerted a beneficial influence upon malarious districts. Four-fifths of Australian vegetation consists of the *Eucalypti*, and Australia, on the whole, might be said to be pretty free from violent endemic or miasmatic poisons, and, concerning the latter, they might be said to exist only as the *Eucalyptus* receded. The physical geography of Australia did not differ from that of other countries, but the vegetation of the *Eucalypti* was absolutely indigenous to Australia and Tasmania. The chemical contents are neither poisonous nor virulent, and from the tree might be obtained a tannate gum resin, a volatile acid, and a volatile oil, peculiarly of Eucalyptic origin. The aroma of the volatile acid present in the *Eucalyptus* might be detected in the air, along with that of the oil, when travelling in the bush. From all that he could gather on the subject he arrived at the conclusion that there was an active agency existing in Australian vegetation over that of other countries, and the exhalation from which gave to the atmosphere an invigorating and healthy tone. After examining all the evidence he came to the conclusion that the *Eucalyptus* was a fever-destroying tree."



In a report from Algeria, Consul General Playfair states that many of the early colonists who worked in the iron mines of Moktor-el-Hordid died during the summer owing to the unhealthy character of the district. But since the plantation of over 100 000 *Eucalyptus* trees the fever has disappeared and the miners are able to work at any season of the year. The *Eucalyptus* has also been largely planted in marshy and malarious districts on the Continent with a decided success in purifying the air of miasmatic exhalations.

The oil obtained from the *Eucalyptus Amygdalina*, in addition to being a deodorant and a disinfectant, is "now recognised in the hospitals of Europe as an antiseptic of great power." It is, moreover, considered a very efficacious external remedy for cutaneous diseases, as it stimulates and promotes the healthy action of the skin. In order, therefore, to utilise the valuable Sanitary properties of the *Eucalyptus* for domestic use, we have united its active principle with Toilet Soap, thereby combining a Purifying and Refreshing Soap for the Skin with an Aromatic Disinfectant for the Apartment.

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WHOLESALE PERFUMERS & TOILET SOAP MAKERS,
22 SILK STREET, CITY, LONDON.

THOMPSON, MILLARD & CO.

LIMITED,

CURTAIN ROAD, LONDON, E.C.

Telegraphic Address, "BEATROP LONDON."

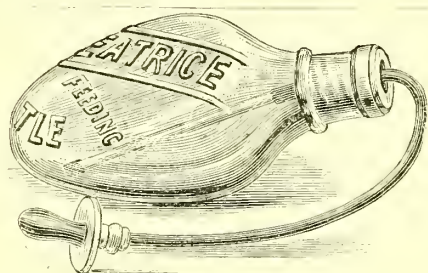


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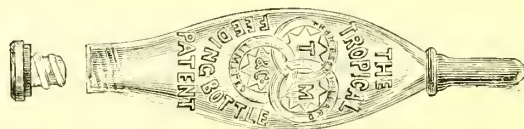
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BEATRICE AND TROPICAL FEEDING BOTTLES.



THE "BEATRICE" FEEDING BOTTLE.

With opal glass screw stopper, best black rubber fittings, each in handsome shouldered box arranged to stand the feeder in while filling, and tube and bottle brush, per dozen 8s., subject to usual discount. This Feeder combines the advantages of the straight and bent neck bottles, can be laid on either side without leakage, and is easily cleaned.



THE "TROPICAL" FEEDING BOTTLE.

THOMPSON, MILLARD & Co.'s new PATENTED Boat-shape Feeding Bottle. Fitted with screw glass stopper or metal screw cap at end to allow of cleaning. In two sizes. Illustrated Price List on Application.

Special attention paid to Export Orders, and Illustrated Price Lists posted free to any part of the world on application.

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CRAWSHAW'S CRYSTAL

DYES.

BROWN
VIOLET
MAGENTA
PUCE
CRIMSON
BLUE
MAUVE
MAROON
PURPLE
LAVENDER
ORANGE
CARDINAL
SLATE
YELLOW
BLACK
REVIVER
GREEN
PONCEAU
SCARLET
PINK
CLARET
CERISE

TRADE

MARK.



ROSE
CANARY
GREY
CAMBRIDGE
BLUE
OXFORD BLUE
NAVY BLUE
DARK BLUE
LIGHT BLUE
RED
SULTAN RED
PRIMROSE
PEACH
BLOSSOM
RUBY
LILAC
DARK BROWN
LIGHT do.
DARK GREEN
BUFF
PLUM
DRAB

THESE Dyes are specially manufactured for the purpose of affording to heads of families and others the means of Dyeing at home, for a small cost, Faded Articles of Wearing Apparel, &c. Silks, Ribbons, Feathers, Woollen Goods and Stuffs of all descriptions take the Dye readily. They are easy to use; they are economical in price. The colours are beautiful and brilliant, and anything can be dyed with them in a few minutes. One Sixpenny Packet of the Crystals will go as far as six Sixpenny bottles of the ordinary Liquid Dyes. Each colour will produce any desired shade of its own colour, according to the quantity used. There is sufficient in a Sixpenny Packet to Dye a Lady's Dress, or half-a-dozen Children's Frocks, or 100 yards of Ribbon, &c., &c.

Chemists who have not yet tried these Dyes will find it to their advantage to do so. There is no loss or mess from leakage, and their great utility and superiority has been readily proved wherever they have been tried.

Ebonised Counter Case containing
6 gross 1d. Dyes, price 42s.

Ebonised Counter Case containing
1 gross 6d. Dyes, price 48s.

	Per Gross.		Per Gross.
1s. Bottles Crawshaw's Crystal Dyes. In Boxes of 1 doz.	96/	1d. Packets Crawshaw's Useful Dyes. In 3 gross Counter Case with Glass Lid	7/
6d. Boxes Crawshaw's Crystal Dyes. In $\frac{1}{2}$ gross (7 doz.) Counter Case with Glass Lid	48/	1d. Packets Crawshaw's Useful Dyes. In $\frac{1}{2}$ gross Cardboard Boxes	7/
6d. Boxes Crawshaw's Crystal Dyes. In Boxes of 1 doz. (14)	48/	1d. Packets Crawshaw's Useful Dyes. Mounted on $\frac{1}{2}$ gross Cards	7/
3d. Packets Crawshaw's Useful Dyes. In $\frac{1}{2}$ gross Cardboard Boxes	21/	The Excelsior Penny Dyes. Mounted on Cards of $\frac{1}{2}$ gross each. These Dyes are good value for the money; suitable for low-class Wholesale Trade, and where Cheap Goods are required. There is no maker's Name on the Packets or Cards	5/8
3d. Packets Crawshaw's Useful Dyes. Mounted on Cards of $\frac{1}{2}$ gross	21/	6d. Perfect Black Dye. In $\frac{1}{2}$ gross Wood Boxes	48/
2d. Packets Crawshaw's Useful Dyes. In $\frac{1}{2}$ gross Cardboard Boxes	14/	3d. Perfect Black Dye. In $\frac{1}{2}$ gross Wood Boxes	21/
2d. Packets Crawshaw's Useful Dyes. Mounted on Cards of $\frac{1}{2}$ gross	14/		

SUPPLIED BY ALL THE WHOLESALE HOUSES.

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STRONGEST "SAFE DISINFECTANTS."

CALVERT'S PATENT 50 % CARBOLIC POWDER

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CALVERT'S PATENT SOLUBLE CRESOL

Is a combination of Cresylic Acid (Cresol) with Carbolic Acid (Phenol), Creosote, and other ingredients needful to make it a useful disinfectant, readily miscible with water in any proportion. Its antiseptic strength is much above that of any other "Soluble" disinfectant, and consequently it is far more effective.

7,	16,	and 30 oz. Bottles	} Cases extra.
4/	8/	„ 12/- per Dozen.	
1	Gallon Tins	... 50/- per Dozen.	
5	„	Drums, 3/9 per Gall.	} Inclusive of Drums and Casks.
36	„	Casks, 3/4 „ „	

Full Instructions for use on each Package.

REPORT FROM AN EMINENT SHEEP FARMER IN SOUTH AFRICA.
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CONTAINS NO PRUSSIC ACID. CONTAINS NO ALCOHOL. MADE OF PURE ALMONDS.

WRIGHT LAYMAN & UMNEY, SOUTHWARK-LONDON.

INDEX TO ADVERTISEMENTS,

Pages v and vi.

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THE MOST DELICIOUS SAUCE IN THE WORLD.

This cheap and excellent Sauce makes the plainest viands palatable, and the daintiest dishes more delicious. To Chops and Steaks, Fish, &c., it is incomparable. Sold by Grocers, Oilmen, Chemists, &c., in Bottles, 6d., 1s., and 2s. each.

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THE BEST IN THE WORLD.

Makes delicious Puddings without Eggs, Pastry without Butter, and beautiful light Bread without Yeast. In 1d. Packets; 6d., 1s., 2s., and 5s. Tins.

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The best, cheapest, and most agreeable tonic yet introduced. The best remedy known for Indigestion, Loss of Appetite, General Debility, &c. Restores delicate individuals to health and vigour. In Bottles, 1s. and 2s. each.

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For making delicious Custards without Eggs, in less time and at half the price. Unequalled for the purposes intended; will give the utmost satisfaction if the instructions given are implicitly followed. Sold in Boxes, 2d., 6d., and 1s. each.

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TYRER'S WORCESTER SAUCE. YORKSHIRE SAUCE. "BOROUGH" KETCHUP.

Best Value that Money can Purchase.

Mr. PETER TYRER,

SCHOOL OF COOKERY,
CRYSTAL PALACE, S.E., January, 1883.

SIR,—I have been using the "BOROUGH" KETCHUP, and am very pleased with it. Its flavour is excellent, both for all kinds of Savoury Dishes and Soups; and I most certainly should advise every Cook and Housekeeper to use it, FOR I HAVE NEVER YET MET ITS EQUAL.

MARIAN SMITHARD, *Lectress on Cookery.*

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	Per gross.		Per gall.
Large Sample Bottles (1d. size), in 1-doz. parcels	... at 5/6	In 1-gallon Bottles	... at 1/6
1/4-Bottles (flat reputed 1/2 pints)	... at 16/-	In 3-gallon Bottles	... at 1/4
Imperial 1/2-pints (round stoppered bottles)	... at 32/-	In 12 1/2-gallon Casks	... at 1/3
Gallon Bottles, charged 6d. each		} but same price allowed when returned in good condition.	
3-gallon "	2/-		
12 1/2-gallon Casks "	4/6		

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	Per gross.		Per gross.
Large Sample Bottles (1d. size), in 1-doz. parcels	... at 5/6	1/2-Bottle (reputed pints)...	... at 26/-
1/4-Bottles (reputed 1/2-pints)	... at 16/-	1 Gallon Bottles...	... at 2/- each, bottles free.

These Sauces are good and wholesome, well got up, each bottle being sealed, labelled, and neatly wrapped, also labelled outside wrapper; give great satisfaction and command a ready sale.

EXTRA QUALITY SAUCES, TYRER'S WORCESTER and TYRER'S YORKSHIRE.

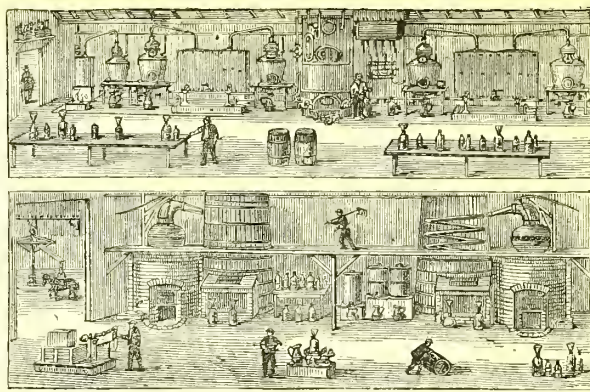
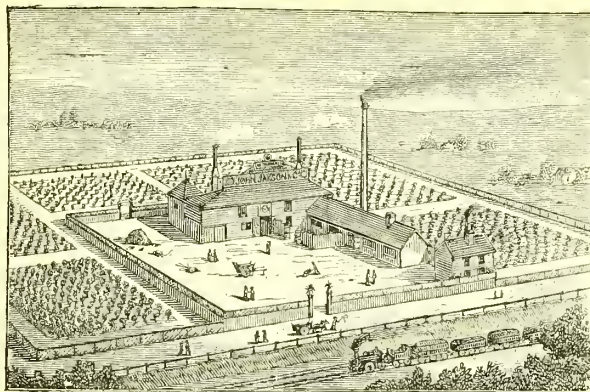
	Per gross.		Per gross.
Large Sample Bottles (1d. size), in 1-doz. parcels	... at 6/6	*Imperial 1/2-pints	... at 36/-
*1/4-Bottles (reputed 1/2-pints)	... at 24/-	1-gallon Bottles	... at 3/- each, bottles free.

* In round bottles, glass stoppers, neatly labelled, wrapped and tied, and confidently offered as being the best money value in the market at the present time.

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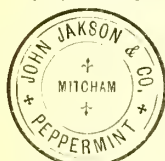
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TRADE MARK.

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PARIS, 1885.

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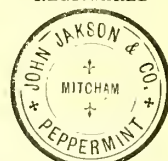
MELUN, 1880.

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Mitcham has been renowned throughout this and part of the previous century for the successful cultivation of Peppermint, Lavender, and other medicinal plants, from which oils of superior quality have always been produced; but at no previous period have the means for obtaining products of the highest quality been so successfully carried out as they have been since the introduction of Messrs. JOHN JAKSON & CO.'s system.

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MITCHAM PEPPERMINT OIL, Rectified 44/ "
MITCHAM PEPPERMINT OIL, Double Rectified 47/ "
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Double Rectified Extra 58/
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Makes Starched Linen like new. Does not stick to spider-like Materials.
Once tried always wanted. Used in the Royal Laundries. Sold every-
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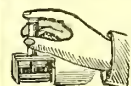
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BARNES' IMPERMEABLE CARRAGEEN POULTICE.

Emollient and antiseptic; pliable, portable, adhesive; when wetted adapts itself
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for days. Invaluable for travellers and others. Also

CARBOLISED IMPERMEABLE CARRAGEEN POULTICE,
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(NO MUSTY FLAVOUR).

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The GENUINE Euxesis bears the following distinctive marks:—

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For producing Local Anæsthesia.
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Containing pure Vegetable Ivory
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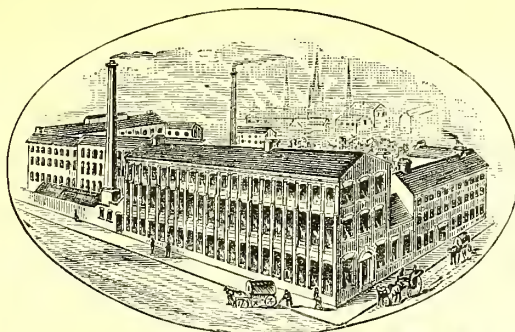
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The BIRKBECK ALMANACK, with full particulars, on application.
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Telegraphic Addresses { "WYLEYS COVENTRY;"
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WYLEYS & CO.

(PARTNERS: F. WYLEY, M.R.C.S., ENG., L.S.A., AND W. F. WYLEY, F.G.S.),

COVENTRY,

And 1a BURY STREET, ST. MARY AXE, LONDON, E.C.

(ESTABLISHED 1790),

MANUFACTURING AND ANALYTICAL CHEMISTS,
AND WHOLESALE AND EXPORT DRUGGISTS.

PURE TEREBENE (Wyleys).

WE have been preparing this article since its first introduction; and on the appearance of Dr. MURRELL'S paper issued a descriptive slip, copies of which may still be had.

The TEREBENE of our manufacture is guaranteed to be free from all irritating impurities, and of correct boiling point, proving the absence of allied bodies produced by the action of Sulphuric Acid on Turpentine Oil.

GELATINE-COATED PILLS (OVAL).

THE only oval gelatine-coated pills of English manufacture in the market. The distinctive colours of the ingredients contained within them show through the transparent covering, and our pills are admirably adapted for the elegant administration of *single drugs*, as well as compound pill-masses. Thus, our *Quinine* ($\frac{1}{2}$ gr., 1 gr., and 2 gr.) pills are perfectly white, soluble, and tasteless. The following are selected as examples:—

<i>Pil. Hydrarg. et Arsenic. Iodid.</i> (Wyleys).—Each pill equivalent to 5 minims of Donovan's solution	Gross	bots.	1/8
<i>Pil. Hypophosph. Co.</i> (Wyleys).—Each pill or capsule represents one fluid drachm of syrup of the Hypophosphites, and contains iron, lime, soda, potash, manganese, quinine, and strychnine, in combination with hypophosphorus acid	"	"	2/6
<i>Pil. Ferri Quininae et Strychninae Phosph.</i> (Wyleys).—Representing Easton's Syrup, each pill being equivalent to phosphate of iron 1 grain, phosphate of quinine 1 grain, phosphate of strychnine 1-32 grain	"	"	3/-
<i>Pil. Bismuth. Sodae et Zingib.</i> (Wyleys).—Bismuth Nit. 2 gr., Sodae Carb. Exsic 2 gr., Gingerin $\frac{1}{2}$ gr.	"	"	2/-
<i>Pil. Bismuth. Pepsin. Comp.</i> (Wyleys).—Bismuth Nit. 2 gr., Pepsin. Porci 1 gr., Ferr. Redact. 1 gr., Strychninae 1-24 gr.	"	"	3/-
<i>Pil. Leptandrin. Colocynth et Hyoscyam.</i> (Wyleys).—Leptandrin. 1½ gr., Ext. Coloc. Co. 2½ gr., Ext. Hyoscyam. 1 gr.	"	"	4/6
<i>Pil. Quininae Sulph.</i> (Wyleys), $\frac{1}{2}$ gr.	"	"	2/2
<i>Pil. Quininae Sulph.</i> (Wyleys), 1 gr.	"	"	2/4
<i>Pil. Quininae Sulph.</i> (Wyleys), 2 gr.	"	"	3/6
<i>Pil. Phosphori</i> (Wyleys), 1-30 gr.	"	"	3/-
<i>Pil. Phosphori</i> (Wyleys), 1-100 gr.	"	"	3/-
<i>Pil. Morph.</i> , $\frac{1}{2}$ gr., et <i>Atropinae Sulph.</i> (Wyleys), 1-100 gr.	"	"	3/-
<i>Pil. Hydrarg. Biniodid</i> (Wyleys), 1-16 gr.	"	"	1/8

A special list of the Gelatine-coated Pills manufactured in our Laboratories will be forwarded on application.

IMPROVED AND LATEST MACHINERY

PARIS, 1878.

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DRUG GRINDERS,

WHOLESALE

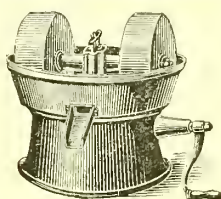
CHEMISTS & DRUGGISTS,



PAINT AND COLOUR MANUFACTURERS, AND OTHERS.

HAND EDGE RUNNER MILL.

With Iron or Granite Rollers and Bed.

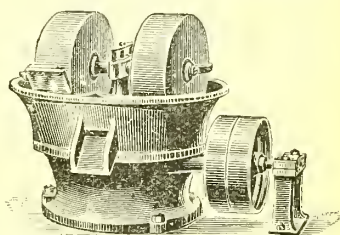


HAND MIXING AND CRUSHING PAN MILL.

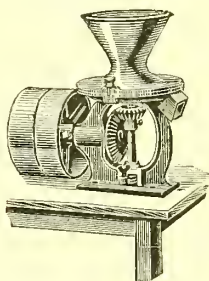
For Ointments,
Pastes,Powders,
&c., &c.

POWER EDGE RUNNER MILL.

With Iron or Granite Rollers and Bed.

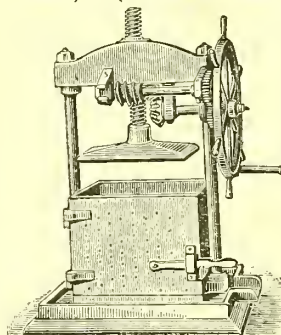


NEW DRUG MILL.

For Ginger, Roots, and all kinds of friable
materials.

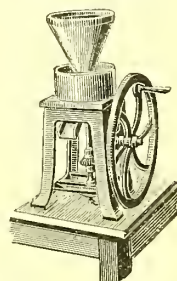
COMPOUND PRESS.

For Tinctures, &c. (made in Wood and Iron).

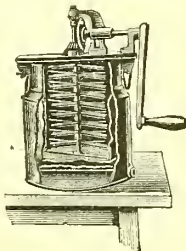


HORIZONTAL MILL.

For Dry Powders.

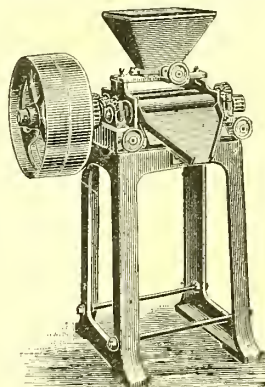


NEW HORIZONTAL MIXER,

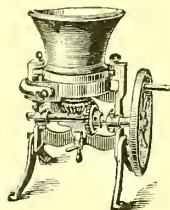
For Amalgamating Compounds, &c. (made with
or without casing).

NEW GRINDING MILL

For Pastes, Colours, and Inks.



IMPROVED PAINT MILL.

For Mixing and Grinding Colours in Water or
Oil ready for use.

MACHINES FOR SPECIAL PURPOSES, EVAPORATING PANS, &c., MADE TO ORDER.

Prices and particulars on application to

FOLLOWS & BATE, LIMITED, Engineers,

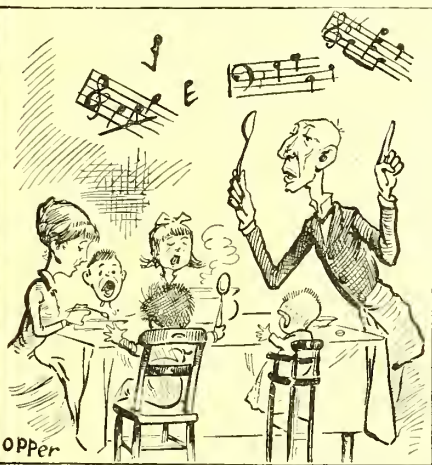
DUTTON STREET WORKS, MANCHESTER.

A Great Novelty for Retail Chemists.

We reproduce below what must certainly prove one of the most effective and entertaining advertising mediums ever issued. The matter is copied from an attractive "Counter Wrapper," of which suitable quantities are furnished to retail chemists FREE OF ALL EXPENSE, and with their business card printed thereon in the blank space at foot as shown below. This sketch, "Mush and Melody," is but one of a series equally as humorous and original, and each chemist will be furnished with an assorted lot upon application to THE CHARLES A. VOGELER COMPANY, with whom this novel idea originated, and who are the proprietors of the celebrated ST. JACOBS OIL. This remarkable remedial agent has, on account of its magical pain-curing properties, especially in cases of rheumatism, attained in all parts of the world a sale and popularity truly unequalled; and has been honoured with six gold medals at recent World's expositions. This unique offer affords chemists an opportunity of supplying all their friends and customers with choice bits of American humor, and each dealer in the United Kingdom will certainly do well to send his full name and address, PLAINLY WRITTEN, at once to the Great Britain branch of THE CHARLES A. VOGELER COMPANY, 45 FARRINGTON ROAD, LONDON. As before stated, the wrappers will be delivered to dealers free of all expense, and bearing their card.—Editor "THE CHEMIST AND DRUGGIST."

"MUSH AND MELODY."

[From the Australian edition of the St. Jacobs Oil Family Calendar and Book of Health and Humor for 1886.]



LATELY I have been giving a good deal of attention to health—of other people. The gentle reader will notice that, as a rule, the man who gives the most time and thought to this subject is an invalid himself; just as the young theological student devotes his first sermon to the care of children, and the city politician talks the smoothest on the subject of how and when to plant cauliflower or wean a calf from the parent stem.

Having been thrown into the society of physicians a great deal the past two years, mostly in the role of patient, I have given some study to the human form; its structure and idiosyncrasies, as it were. Perhaps few men in the same time have successfully acquired a larger or more select repertoire of choice diseases than I have. I do not say this boastfully. I simply desire to call the attention of our growing youth to the glorious possibilities that await the ambitious and enterprising in this line.

Starting out as a poor boy with few advantages in the way of disease, I have resolutely carved my way up to the dizzy heights of fame as a chronic invalid and drug-soaked relic of other days. I inherited no disease whatever. My ancestors were poor and healthy. They bequeathed me no snug little nucleus of fashionable malaria such as other

boys had. I was obliged to acquire it myself. Yet I was not discouraged. The results have shown that disease is not alone the heritage of the wealthy and the great. The poorest of us may become eminent invalids if we will only go at it in the right way. But I started out to say something on the subject of health, for there are still many common people who would rather be healthy and unknown than obtain distinction with some dazzling new disease.

Noticing many years ago that imperfect mastication and dyspepsia walked hand-in-hand, so to speak, Mr. Gladstone adopted in his family a regular mastication scale; for instance, thirty-two bites for steak, twenty-two for fish, and so orth. Now I take this idea and improve upon it. Two statesmen can always act better in concert if they will do so.

With Mr. Gladstone's knowledge of the laws of health and my own musical genius, I have hit on a way to make eating not only a duty, but a pleasure. Eating is too frequently irksome. There is nothing about it to make it attractive.

What we need is a union of mush and melody, if I may be allowed that expression. Mr. Gladstone has given us the graduated scale, so that we know just what metre a bill of fare goes in as quick as we look at it. In this way the day is not far distant when music and mastication will march down through the dim vista of years together.

The Cauliflower Chant, the Vermicelli Waltz, the Mush and Milk March, the sad and touchful Gooseberry Tart Refrain, the gay and rollicking Oxtail Soup Galop, and the melting Ice Cream Serenade will yet be common musical names.

Taking different classes of food, I have set them to music in such a way that the meal, for instance, may open with a Soup Overture, to be followed by a Roast Beef March in C, and so on, closing with a kind of Mince Pie La omnambula pianissimo in G. Space, of course, forbids an extended description of this idea as I propose to carry it out, but the conception is certainly grand. Let us picture the jaws of a whole family moving in exact time to a Strauss waltz on the silent remains of the late lamented hen, and we see at once how much real pleasure may be added to the process of mastication.

The Proprietors of ST. JACOBS OIL, believing that health and humour go hand-in-hand, publish sketches like the foregoing in connection with advertisements of their great pain-cure, feeling confident that these will be enjoyed as specimens of American humour. Happiness has been aptly defined as the absence of pain, and millions of people have been made happy through being cured by ST. JACOBS OIL of RHEUMATISM, NEURALGIA, TOOTHACHE, HEADACHE, LAMENESS, SCALDS, BURNS, SPRAINS, BRUISES, and ALL PAINS for which an external remedy can be applied. It conquers pain. It never fails to cure. Its healing powers are arvellous. Thousands of men and women, who have been declared incurable at baths and in hospitals, have thrown away their crutches, being cured after using ST. JACOBS OIL. Sold by chemists and druggists everywhere, at 2s. 6d. per bottle. By post, 2s. 9d. Directions in eleven languages accompany every bottle. Beware of worthless imitations. Every bottle bears our signature on the wrapper as here shown.

THE CHARLES A. VOGELER Co., Baltimore, Maryland, U.S.A.

Great Britain Branch—45 FARRINGTON ROAD, LONDON.

The Charles A. Vogeler Co

T. JACOBS OIL IS SOLD BY

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DE VRY'S CINCHONA COMPANY.

IMPORTANT NOTICE.

2, Fisher Street, Red Lion Square, London, W.C.

We beg to notify that we have this day transferred our business, together with all formulæ, processes, stock, plant and goodwill, to Messrs. Fletcher Fletcher & Stevenson, North London Chemical Works, Holloway, to whom all orders for Extract. Cinchonæ Liq. B.P. (De Vry) should in future be addressed.

(Signed) DE VRY'S CINCHONA COMPANY.

January 1st, 1886.

IN reference to the above, we have pleasure in announcing that we have acquired the sole right to manufacture here

Ext. Cinchonæ Liq. (De Vry)

British Pharmacopœia, 1885.

We shall continue to make this well known preparation in the apparatus specially constructed for the De Vry's Cinchona Company. Evaporation being conducted in glass vessels only, there is no possibility of metallic contamination, and as the whole operation is performed *in vacuo*, the alkaloids and their collateral principles are absolutely unaffected by heat, oxidation, or other deteriorating influence.

The Extract retains the normal orange-red colour of the percolate from which it is derived. It is distinguished from similar preparations by being PERFECTLY SOLUBLE in distilled water, and, when so diluted, by remaining permanently bright and free from deposit. We guarantee it to be prepared from none but the finest Red Cinchona Bark, and to correspond in every respect to the requirements of the *British Pharmacopœia*, 1885.

Ext. Cinchonæ Liq. B.P. (DE VRY)

May be obtained through any Wholesale House, or direct from us at the following rates:—

¼-lb. Bottles, 3/6; ½-lb. Bottles, 6/6; 1-lb. Bottles, 12/- each.

SPECIAL QUOTATIONS FOR QUANTITIES.

FLETCHER FLETCHER & STEVENSON.

Holloway, London, N.